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PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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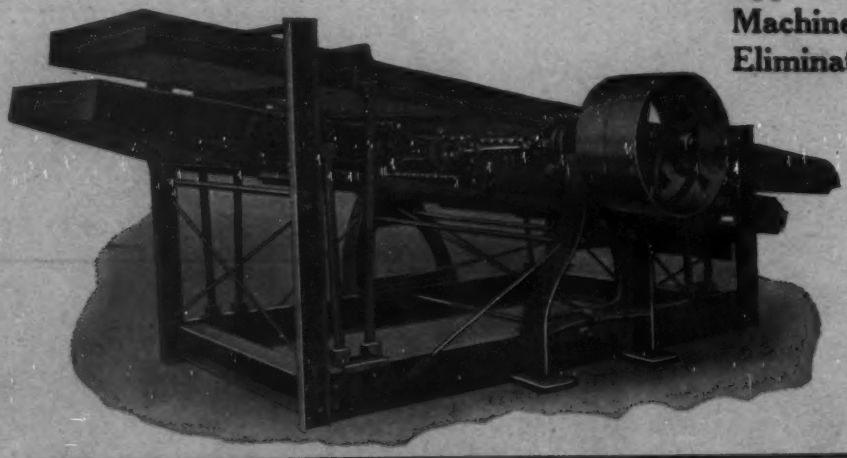
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PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

FIFTY-FIRST YEAR

PUBLISHED EVERY THURSDAY BY THE

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PULP WORKERS IN SWEDEN STRIKE FOR MORE WAGES

Cable Advices State That Pulp Industry Is in Grip of Widespread Strike, Involving More Than 33 Per Cent of the Employees and Closing Down Twenty-Seven Large Mills —Mills of Norway and Finland Said Not to Be Affected —Shutdown Will Materially Affect Tonnage of Chemical Pulp Available for Shipment—Strike Causes Firmer Price Tone in the New York Pulp Market.

Latest cablegrams received from Sweden indicate that the pulp industry is now in the grip of a widespread strike involving more than 33 per cent of the workers in the industry as well as closing down 27 large mills. The 5,000 employes which are now holding out for a 20 per cent wage increase have heretofore been working under a wage agreement, ending February 1, 1923. Mill owners, on the other hand, have been contemplating reductions in salaries varying from 10 to 20 per cent. In the estimation of R. S. Kellogg, secretary of the News Print Service Bureau, New York, the situation is a serious one, and in view of the fact that the employers and workmen are about 40 per cent apart in their views, an immediate settlement does not appear to be in sight.

5,000 Employes in Lockout

"A cablegram received last Saturday morning," says Mr. Kellogg, "by the Swedish-American Chamber of Commerce in this city states that 27 mills, having 5,000 employees, are down on account of the pulp and paper mill strike in Sweden. In view of the fact that there are said to be 145 pulp and paper mills in Sweden with a total of 15,000 employees, it would appear that the strike is among the larger mills."

In a prior report to Bureau members, Mr. Kellogg stated that "a long strike at this time would prevent the accumulation of stocks at the other mills for shipment when navigation opens. The northern Baltic ports of Sweden are generally closed by ice at this time of year," he said, "leaving only the southern Swedish mills, which furnish about twenty per cent of the supply, with ocean shipping facilities.

Does Not Affect Norway or Finland

"It is said that mills in Norway or Finland are in no way affected by the Swedish dispute," the report continues, "but how far the Swedish situation may develop or how long it may last cannot be predicted."

Will Strengthen Market, Says Johaneson

Nils R. Johaneson, president of Johaneson, Wales and Sparre, Inc., 16 East 41st street, New York, who has just returned from Scandinavia where he has been for the last two months visiting the Swedish mills, states that from his observations of Swedish conditions present indications are that the market this winter and spring for spot pulp will be strong.

"The reasons for this," according to Mr. Johaneson, "are that a widespread strike has just started in Swedish Pulp Mills which already has affected more than 35 per cent of the mills and which threatens to spread throughout the industry. This shutdown of the Swedish mills means that the tonnages available will be materially decreased."

On top of this, continued Mr. Johaneson, "the last open water shipment consignments which arrived in this country were very small in comparison to the shipments last year, due to the fact that the Swedish pulp manufacturers were cleaned out of their available supplies of pulp. This resulted from the fact that the American market alone took twice as much pulp as previously, while the demand from other markets, such as England, was good.

"At present," Mr. Johaneson stated, "the Swedish manufacturers with whom I have talked expect a big demand from England and Continental Europe."

In the estimation of other prominent importers of Swedish pulp, supplies on hand or in transit will be sufficient to meet contract deliveries and tide the industry over the next six weeks, during which time the strike difficulties will, undoubtedly, have become adjusted, in their belief. The slackened business which prevailed over the holiday period has allowed a reserve supply to accumulate, but news of the strike in Sweden has given the tone of the market a sudden bullish twist, and evidences of a considerably higher level of prices are already beginning to be felt.

Price Advances Prognosticated

"All importers of pulp," said Mr. Wales, of the firm of Johaneson, Wales and Sparre, Inc., "anticipate sharp advances in foreign pulp prices in February. It is my belief that the Swedish mills will not accede to the demands of employees. Some pulp which is held in reserve at the open ports in southern Sweden will be shipped, but unless the demand becomes very acute, making it practical to carry the commodity overland from points in northeastern Sweden to Gothenburg, at an added expense of $7 to $8 per ton, there will be scarcely no other Swedish pulp available."

Favorable Report on Forestry Bill Expected

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 15, 1923.—While definite information is not obtainable, it is understood on very good authority that Secretary of Agriculture Wallace has submitted to the sub-committee of the House Committee on Agriculture, which is dealing with the Snell forestry bill, certain amendments which he has made to the substitute bill which he submitted a short time ago to the committee.

Members of the sub-committee feel that there is a very good possibility of getting a favorable report on the forestry bill in the very near future. It is believed also that this legislation could be passed by the House during the present session of Congress, but difficulties are foreseen in the Senate. However, with administration officials favoring a forstry bill, there is a possibility of its enactment into law at this short session, although it is not probable that it will be done. It is understood that members of the sub-committee are looking with favor upon the bill submitted by the Secretary of Agriculture as amended except that some of the appropriations asked are considered too large and these will probably be cut down.

Paper Mills in Holyoke District Increase Wages

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., January 15, 1923.—Although at a conference of the paper manufacturers of this section some time ago, with Labor Commissioner Adam Wilkinson of the American Writing Paper Company, it was decided that a wage increase was not advisable. An increase in the wage schedule of the Crocker-McElwain Company forced the other paper companies to hold other conferences with the result that an increase of from 5 to 8 cents an hour went into effect in most of the paper mills of the city Monday of this week. The wage increase was given by those companies represented at the conferences, including mills in Holyoke, South Hadley Falls, Woronoco and Mittineague. An increase in the Crocker-McElwain Company and the Chemical Paper Company went into effect today, but it is not known just what the increase amounts to as yet. It was stated, however, that it will be as great as increases granted to other mills.

Increases were discussed Sunday at the afternoon meeting of the Allied Paper Trades Council. It is expected that a few points in the new schedule will have to be straightened out before all unions are satisfied with the new hourly rates. Each individual union will either accept or reject the schedule.

Hollingsworth & Whitney Buy Water Privilege

[FROM OUR REGULAR CORRESPONDENT.]

CALAIS, Me., January 15, 1923.—Important water power privileges on the St. Croix river have just been sold by the H. F. Eaton & Sons Company of Calais to the Hollingsworth & Whitney Company of Maine and New Brunswick, and it is reported that the transfer is a preliminary to the construction of a big pulp and paper mill either on the Canadian or American side of the river.

The Hollingsworth & Whitney Company comprises affiliated corporations operating both in Maine and New Brunswick, the corporations having headquarters in Boston, and being among the largest paper manufacturing concerns in the world, with mills at Winslow, Madison and Gardiner, Me., as well as newly acquired properties in New Brunswick comprising 50,000 acres of timberlands.

It is understood that with the purchase was included options held on several pieces of property in Duke's ward, St. Stephen, N. B. The water powers involved are at the mouth of the St. Croix river, astride the international boundary line which divides Maine from the province of New Brunswick, and until 1920 had been in the control of the Eaton interests of Calais for nearly half a century.

The Eaton fortune was founded by the late Henry F. Eaton of Calais, who started in without funds and acquired timberland during the course of years that was sold to a timberland holding corporation in 1920 for more than two million dollars. The water powers and lumber mills on the St. Croix, which had declined in importance owing to dimunition of the lumber business in this section went to Edward B. Draper of Bangor, who formed a corporation, Henry F. Eaton & Sons Company, which has just disposed of its rights to the paper company. It is expected that the enterprise will greatly stimulate business in this section, affording employment to hundreds of people in a locality that was formerly one of the biggest lumber producing sections of the United States. At one time there were 28 lumber mills on the St. Croix river at Calais.

Paper Firms Want Kennebec Storage Basin

[FROM OUR REGULAR CORRESPONDENT]

AUGUSTA, Me., January 15, 1923.—Large paper concerns on the Kennebec river are joining in a movement to secure charters from the legislature to make possible the construction of storage basins on the Kennebec, which is the only large river in Maine which has not had its resources conserved in the line of regulating flowage. The corporations in the movement include the Hollingsworth & Whitney Company at Winslow, the Shawmut Manufacturing Company of Fairfield, the Great Northern Paper Company at Madison, the International Paper Company at Solon, and cotton manufacturers at Waterville and Augusta.

The Androscoggin and the Penobscot rivers have both been developed by the construction of storage basins so that in the dry seasons, when the manufacturing concerns on the banks of the Kennebec have been handicapped by low water, those situated on the Androscoggin and Penobscot have been able to operate at full capacity and without loss.

Two sites are being considered, one at Dead River and the other at Brassau lake in the Moosehead section. It is likely that a large basin would be constructed at Dead River if this location should be chosen. Options on most of the properties that would be affected there have been obtained.

The reason for the long delay in conservation of water power on the Kennebec has been lack of co-operation among the various manufacturing interests on the river. After years of discussion, they have finally agreed on a concerted plan, and it is more than likely that the legislature will approve their petition. In all probability the state will insist on a clause guaranteeing in the event of hydroelectric development of the increased water power that none of the power will be sent out of Maine.

Donnacona Paper Company to Double Output

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 15, 1923.—The Donnacona Paper Company, which operates a 10,000-ton news print mill at Donnacona, Que., plans to immediately increase capacity to 60,000 tons annually by the installation of additional groundwood and machine capacity, which will be in operation by January, 1924. Public offerings will be made by the Royal Securities Corporation, Limited, within the next few days, of an issue of $750,000 6 per cent first (closed) mortgage sinking fund gold bonds, of this company. The new issue of bonds is being made to finance the necessary additions to groundwood and machine capacity. This company is one of the most successful news print enterprises in Canada. Until recently it was under the management of Geo. M. McKee. It completely controls the Jacques Cartier watershed and water powers, and its mills at the junction of the Jacques Cartier and St. Lawrence rivers, thirty miles from Quebec, have long been regarded as one of the lowest cost news print mills in Canada. The company's shares are very closely held, the controlling interests being in the hands of Northern New York interests. There is considerable Montreal capital in the enterprise as well. The preferred and common shares are unlisted, and are not actively dealt in, but recent quotations are 105 for the 7 per cent preferred stock and 200 bid for common. The common shares pay 8 per cent and some talk has been heard recently of increased dividends on the common. The paper machines which will be installed to increase the company's capacity will, it is said, be among the largest in the world, rivalling the machines recently installed by the Walmsley Company at the Abitibi mill, and those now being installed for Bathurst.

International Paper Co. Increases Wages

According to Allen Curtis, vice-president of the International Paper Company, 30 Broad street, New York, and manager of the department of manufacturers, the International has just made increases of 6 to 7 per cent in the wages of approximately one-third of its total manufacturing force.

"The company felt that its skilled employees deserved a wage increase," said Mr. Curtis to a representative of the PAPER TRADE JOURNAL. "Practically all the mills are affected by this advance."

Pulp and Paper Products Co. Start Plant

[FROM OUR REGULAR CORRESPONDENT]

NORWICH, Conn., January 15, 1923.—The newly organized Pulp and Paper Products Company commenced operations here Thursday, January 11, in its paper mill at Quaker Hill, which has been idle for the past 15 or 16 years. The company has recently expended approximately $35,000 in repairing the mill and adding modern machinery and other necessary equipment. According to the officials of the company still more improvements will be made in the near future.

News Print Plant for Bathurst

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., January 15, 1923.—The Bathurst Company, Limited, is constructing a news print paper plant and financing for the addition is now being carried out. The company has placed with Walmsley & Co., Limited, Bury, England, its order for the two new machines to be installed in the new plant, and the company's representative is now in Canada to superintend the work of erecting them, which will take about two years to complete.

NEW YORK NEWS PRINT MILLS LOOK FOR NEW WAGE DEMAND

Just What New Demands Will Arise From the Montreal Conference Cannot Be Forecast But Manufacturers Admit That the Time Between the Conference and May 1 Will See Negotiations With Labor Leaders and Possibly Arbitration Boards—St. Regis Paper Co. Increases Capital Stock and Increases Board of Directors from Nine to Thirteen—Power Corp. of New York Re-elects Officers.

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., January 15, 1923.—There is a feeling among some of the local paper manufacturers that the labor problem will be advanced again this spring. They expect that out of the convention of labor delegates in Montreal late in March is sure to develop a set of demands for the renewal of the working agreements on May 1. The Sherman Paper Company, St. Regis Paper Company, Degrasse Paper Company and others in Northern New York are involved.

On January 1 an advance of $5 a ton was made on the price of news print paper, a hundred. This may be used by the labor leaders as indicating that it is time to make wage scale advance demands to offset this. On the other hand, manufacturers point out that wages never fell back in proportion to the reduction in the price of paper. Living conditions are holding constant.

Just what new demands will be advanced out of the Montreal conference cannot be forecast by manufacturers, but they admit that they expect that the time between the conference and May 1 will be utilized in negotiations with labor leaders and possibly arbitration boards.

W. P. Creager Goes With Northern N. Y. Utilities, Inc.

W. P. Creager, noted hydraulic engineer, who recently came to Watertown from New York to take charge of the power development expansion plans of the Northern New York Utilities, Inc., and the Power Corporation of New York, was elected a vice-president of the former company at the meeting of directors held Wednesday afternoon. He is also a vice-president of the latter corporation.

A joint engineering force for both concerns has been organized with Mr. Creager at the head.

The fifth floor of the Trust Company building is being fitted for occupancy at once. This floor was formerly occupied by the law firm of Purcell, Cullen & Pitcher.

James P. Brownell, a prominent engineer with offices in Carthage, has just become a part of the joint engineering force and will devote himself to the big problem of power development now being worked out.

At the meeting a resolution was passed to change the common stock from $100 a share to $25 a share and issue to stockholders four shares for the one held. It was further voted to pay the usual quarterly dividend of 1¾ per cent on the preferred stock on February 1.

"All this publicity attempting to tell what developments we are going to make next summer is absurd," said President J. N. Carlisle. "We have 15 different possibilities on the Beaver, Oswegatchie, Racquette and Black rivers, and we will probably develop two or three sites next summer.

"Mr. Creager is making a study to determine what sites will be the most advantageous to develop first, but we will not know for a month what we will do.

"We propose to develop powers so we can keep ahead of the demand and can attract new industries here. Mr. Creager will select the developments to be made first with a view to their proximity to our transmission centers."

Asked concerning a report that the Utilities is seeking a power site at Wegatchie, near Gouverneur. "There is nothing at Wegatchie we want," he laughed. "It is just another one of those crazy reports. They say there is a 2,500 horsepower possibility there. There is but a nine foot average working head there, according to the chart, rated at 75 horsepower."

St. Regis Increases Capital Stock

A $4,000,000 increase in the capitalization of the St. Regis Paper Company was authorized at the annual meeting of stockholders held Wednesday morning in the offices of the company in the Trust Company building. The action was taken to enable the directors to undertake any future expansion desired along the line of the purchase of other properties or mill developments, according to President F. L. Carlisle.

The Board of Directors was increased in number from nine to 13 and the new places were filled by the election of H. E. Machold, J. N. Carlisle, R. B. Maltby and D. C. Middleton. The other directors were all re-elected. They are: F. L. Carlisle, F. A. Empsall, C. C. Burns, J. J. Warren, W. K. Dick, Alvah Miller, D. M. Anderson, Jonathan Bulkley and J. A. Mollenhauer.

The officers were all re-elected at the subsequent meeting of directors. They are as follows: F. L. Carlisle, president; Alvah Miller, D. M. Anderson, and J. J. Warren, vice-presidents; F. A. Empsall, treasurer; C. B. Martin, secretary and assistant treasurer; C. C. Burns, general manager; C. T. Jewell, assistant general manager; William Karls, superintendent.

Asked for information concerning the exact purpose of the increase in capitalization, President Carlisle said: "It is simply for future expansion. It enables the drawing of funds from the treasury for any purchase the company may desire to make, but does not mean that the stock will be issued at once.

"There has been previously authorized $1,000,000 in preferred stock, of which there is outstanding only $779,000. The additional authorization is all in preferred stock. The common stock remains the same, with 400,000 shares authorized and but 310,000 now issued."

All the local directors were present, but only President Carlisle and R. B. Maltby came up from New York. Mr. Carlisle would say nothing concerning the movements of the labor organizations.

Power Corp. of New York Re-elects Officers

All directors and officers of the Power Corporation of New York were re-elected at the annual meetings of stockholders and directors held in the local offices of the company Wednesday afternoon.

The directors are: F. L. Carlisle, F. A. Empsall, J. J. Warren, R. B. Maltby, J. N. Carlisle, D. M. Anderson, D. C. Middleton, W. P. Creager, J. A. Mollenhauser, A. Miller, J. Bulkley, W. K. Dick, T. J. Walsh and C. C. Burns.

The officers are: J. N. Carlisle, president; W. P. Creager, first vice-president; D. M. Anderson, second vice-president; R. B. Maltby, secretary and treasurer; Carl B. Martin, assistant secretary.

This corporation was organized a few months ago and took over several powers, developed and undeveloped, including the large power holdings of the St. Regis Paper Company.

No announcement of special action at the meeting was given out, it being said by Mr. Carlisle that only the election of officers took place at the meeting.

John A. Manning Co. Installing New Machine

[FROM OUR REGULAR CORRESPONDENT.]

TROY, N. Y., January 15, 1923.—The John A. Manning Paper Company, manufacturer of rope, manila and press, counter and insulating boards, is replacing a 68-inch cylinder machine with a new 110-inch machine, and is installing beating jordan and rotary capacity to take care of the increased production of this wider machine.

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CONSOLIDATED PAPER CO. BUYS NEW PAPER MACHINE

Will Make a Grade of Paper Not Now Manufactured by the Company and Will be Installed at Byron or Stevens Point, Depending on Co-operation from Stevens Point in Securing Additional Water Power—Sales Forces and Plant Officers of Northern Paper Mills Hold Second Annual Reunion at Green Bay—J. G. Rosebush Announces Promotions at Northern Paper Mills.

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., Jan. 16.—The Consolidated Water Power and Paper Company, of Wisconsin Rapids, has purchased a new paper machine to make a grade of paper not now manufactured by the company, which will be installed either in the mill at Biron or at Stevens Point, depending upon the attitude of the people of Stevens Point to the proposal of George W. Mead, president of the Consolidated, that they co-operate in securing additional water power. The Stevens Point Chamber of Commerce was asked by Mr. Mead to consider his proposals and if they found them acceptable to co-operate in obtaining the additional water power that is required. The Chamber thus far has taken no action, but a number of citizens has shown a rather lukewarm attitude, which suggests that Stevens Point is not much enamored of Mr. Mead's suggestion and the city is quite willing that the additional development be made at Biron. The Consolidated company has not announced the kind or size machine it has ordered nor when it will be installed.

Stevens Point has been put in the position of a friendly competitor with the nearby village of Biron for the paper mill development by Mr. Mead's proposition to the Chamber of Commerce. He said the paper machine has been ordered and will be placed either at Biron or at Stevens Point.

"The many difficulties in the way of further development of the water power at Stevens Point can be overcome," Mr. Mead said. "For considerable periods of time during the year, the power generated at the Stevens Point power plant of the company is insufficient to operate the present mill machinery. Hence, it does not seem advisable to add any additional paper machine and further development at Stevens Point unless the head at its dam can be increased, for the present, one and one-half feet, and in the future, still higher."

Proposal of Consolidated Co.

The Consolidated proposes to place the new paper machine at Stevens Point with all the additional development and building necessary on account of such increased capacity, provided it can secure rights to increase its head and further develop its power in reasonable terms. Since such terms can be secured only through the creating of a favorable public sentiment toward the development of the city's industries, it is thought by the company that the Chamber of Commerce of Stevens Point would be glad to co-operate with the company along this line."

The company's problem is made more difficult by the low land along the river, which even now is flooded in times of high water and often is inundated by surface water. The paper company suggests that the city excavate the slough to permit the surface water to run off easily and the company proposes to put in large pumps to take off the surface water, but the city pay half the cost of installation and operation of these pumps. The paper company also asks co-operation in securing release from residents along the slough from all claims for damages, except those arising from the negligence of the company, so that they will not constantly be harrassed by small lawsuits.

The Consolidated company suggests numerous benefits to the city if it will co-operate in providing the additional water power. At least 30 additional persons will be employed when the new machine is installed and large crews of men will be required for construction work for a long time. The increased payroll and the improved living districts along the slough, which would be improved, would result in increase in city revenues, it was said.

Stevens Point Paper Mill Makes Improvements

New equipment valued at $10,000 has been installed in the Stevens Point Pulp and Paper Company mill at McDill, near Stevens Point, which resumed operations last week, after being idle since the middle of December. The new equipment will not increase the capacity of the plant materially, but will greatly facilitate operation and increase efficiency. There is a slight increase in working force. The new equipment consists largely of pulp screens, condensers and other pulp-making machinery. Nearly all of the employees of the mill were kept busy on construction work while the mill was not in operation.

Northern Paper Mills Have Reunion

Plans for the coming year were reviewed and performances of the past year were rewarded at the second annual "reunion" of the sales forces and plant officers of the Northern Paper Mills in a Green Bay hotel last week. Judson G. Rosebush, Appleton, general manager of the company, was the principal speaker, reviewing the year's activities, forecasting the future and introducing twelve men who were given promotions.

Mr. Rosebush said it was the policy of the company, so far as possible, to make all promotions from the persons employed in the mill and preference will be given by the employment department to young men who seem capable of advancement.

A filtering plant for the mills is to be constructed during the coming year as one of the major expansion projects. The Northern Paper mills require about as much filtered water as is used by the average city of 25,000 population, he said.

Conditions the past year have been satisfactory, Mr. Rosebush announced. There has been a large reduction in indebtedness and considerable improvement was undertaken. Repairs to the paper machines practically amounted to rebuilding them. Many important changes were made in the towel department to increase efficiency. He also called attention to the improvement in the wood condition. The huge stock of a year ago has been decreased and new wood can be purchased at prices which are satisfactory.

The following promotions were announced by Mr. Rosebush:

D. B. Davies, promoted from sulphite superintendent to assistant mill manager; E. A. Lindberg appointed office manager; Frank Timmerman, promoted from tour boss to paper mill superintendent; Ralph Fannon, promoted from efficiency man to sulphite superintendent; A. K. McNaughton, mill hand, to assistant purchasing agent; James Hansen, from clerk to efficiency man; Oswald Eckardt, awarded full salesmanship; John Nylund, from chemist's assistant to beater room inspector; Thomas Cuish and Michael Heigl, machine tenders to tour bosses; Harold Sherman, finishing room foreman; Jule Bero and James Bins, foremen.

Paper Men Made Bank Officers

F. J. Sensenbrenner, first vice-president and general manager of the Kimberly-Clark Company, was elected one of the five new directors of the First Wisconsin National Bank of Milwaukee, one of the largest financial institutions in the Middle West. Mr. Sensenbrenner was elected to fill one of the five vacancies caused by deaths and resignations in the last three or more years. Mr. Sensenbrenner also was elected a director of the First National Bank of Appleton.

C. A. Babcock, of the Wisconsin River Paper and Pulp Company, was elected a director of the Citizens National Bank of Stevens Point, to succeed the late William T. Whiting, whose death was announced a week ago. Mr. Babcock was one of the original stockholders of the bank when it was organized 30 years ago and was a business associate of Mr. Whiting.

For Ten Years COUPON BOND has been screened through WALPOLE SCREENS

The American Writing Paper Company, the largest paper manufacturing company producing high grade writing paper, has built its business and its reputation upon the foundation of Uniform Quality.

Uniform quality, in part, depends upon uniformly screened stock.

The important work of screening the stock for its highest grade paper, Coupon Bond, has been entrusted for ten years to WALPOLE SCREENS.

BIRD MACHINE COMPANY
South Walpole Massachusetts

Western Representative
T. H. Savery, Jr., 1718 Republic Bldg.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Ltd.
260 St. James Street
Montreal, Canada

THE WALPOLE SCREEN

4747

DEVELOPMENT OF PULP AREAS IN LATIN AMERICA PLANNED

Exploitation Project Involving Half Billion Cubic Feet of Pulpwood in Guatemala and Honduras is Disclosed—Rafael Rodezno, Wealthy Timberland Owner, Contemplates Pulp Mill Construction—$10,000,000 Corporation Formed—Hydro-Electric Power Available—Prominent Executives Foresee Tremendous Possibilities for Future Pulp Production in Central America.

Plans for the development of more than 5,000,000 acres of Central American pulpwood lands containing, at a conservative estimate, between 400,000,000 and 500,000,000 cubic feet of standing timber, available for the manufacture of pulp, were brought to light early this week. Rafael Rodezno, owner of enormous tracts of land in Guatemala and Honduras, and one of the most prominent men of Central America, outlined last Monday, in an exclusive interview with a representative of the PAPER TRADE JOURNAL,

RAFAEL RODEZNO

the work that he has done over the past four years in lumbering and clearing, development of water-power, converting forest land into tame grass pastures for cattle fattening, and the tentative plans which he has formulated for the exploitation of these properties, including the erection of pulp mills in that region.

To Centralize Development in $10,000,000 Concern

The utilization of Central America's pulp resources comes as an important part of the general industrial development now being carried on by Mr. Rodezno, including the construction of a packing plant, lumbering operations, colonization and development of hydro-electric power. This work is now being centralized in a $10,000,000 concern, the Centro-America Corporation.

Mill Site, Power and Labor Ready

"Central American rivers, with their abrupt fall from the plateau to the lowlands, furnish enormous potential hydro-electric possibilities," said Mr. Rodezno, "and this factor, combined with abundant cheap labor and unlimited pulpwood timber, should make this section highly attractive to the manufacturer of wood pulp who looks to United States markets. I have already developed and am using electric power from the river which flows through my property," he continued. "My present facilities could supply me with 3,000 horse-power, but this may be readily trebled or quadrupled with additional installations. Here I have a highly desirable site for both pulp mill and packing plant, and at a point closer to United States than Cleveland is to New York. Cutting of pulpwood and lumbering must naturally precede the work which I am doing in converting forest lands into tame-grass pastures for cattle and subsequent colonization. Of the thousands of acres which I have cleared to date all timber and pulpwood has been destroyed, with the possible exception of mahogany and cedar. This literally means that millions of feet of excellent timber and thousands of tons of potential wood pulp have gone up in smoke.

Woods Reported Suitable for Pulp

"There are some 15 to 20 grades of both hard and soft woods in these semi-tropical forests, of which only three or four are suitable for domestic use or export. Not long ago I sent samples of the many grades of soft woods which abound in the forests of Nicaragua and Honduras," said Mr. Rodezno, "to chemical laboratories in Germany for treatment. These woods were reported as highly suitable for pulp conversion, although it was believed the different fibers would require individual treatment. While I have in mind a plan whereby the percentages of various woods will be averaged to obtain a satisfactory combination of separate grades into a mixed pulp, it is my desire to get in touch with technical pulp experts in this country in regard to two problems. First, what kind of pulp may be produced most advantageously, utilizing the available raw material? Second, what will be the cost of pulp produced under this process?

American Manufacturers Alive to Possibilities

"There are, undoubtedly, numerous large pulp and paper manufacturing companies in the United States that will not be slow to realize the tremendous possibilities that Central America holds as a source of raw material for the years to come. Arrangements might readily be made with one of these concerns to send down a pulp engineer to make a detailed survey of conditions as they exist. If the publishing of my plans in the PAPER TRADE JOURNAL elicits the interest of paper and pulp men in the United States, I shall be glad to have samples of the various grades of wood forwarded here so that adequate tests may be made.

Will Require Modern Machinery

"Only the most modern methods and machinery will be used in exploiting these properties," Mr. Rodezno averred. "Many roads must be constructed in the general development which will be pushed forward during the next few years. Many of these may be utilized in the transport of pulpwood. I feel that the caterpillar tractor will be an important element in the logging and hauling.

"Central America's vast acreages of undeveloped timber lands are the most logical ones to which the American pulp producer can turn. I have been following with interest the inroads which have been made during the past few years into the steadily diminishing supply of standing timber in the United States and Canada. Either the pulp men must push up into northwestern Canada or look elsewhere for the pulp which is to keep America's paper mills and printing presses running in 1930."

Walter S. Rooney Speaks on Felts at Erie

[FROM OUR REGULAR CORRESPONDENT.]

ERIE, Pa., January 17, 1923.—On Tuesday evening of last week Walter S. Rooney, of the Albany Felt Company, Albany, N. Y., delivered before the paper machine employees and executives of the Hammermill Paper Company and H. F. Watson Company a most interesting talk on felt manufacturing and on the paper industry of Japan. Through the use of stereopticon slides Mr. Rooney described in detail the process of felt making and followed this with an exceptionally pleasing story of the customs and conditions in the Japanese paper industry.

Wolf Chipper with Disc Removed

A Chipper *that makes* Less *than* 1% Sawdust

The improved 106 in. Wolf Chipper, in actual tests in the plants where it is installed, is making an exceptional cost saving record.

1. **It is producing uniform chips at a greater speed.**
2. **It is practically eliminating sawdust.**
3. **It is built on a new principle, minimizing wear and reducing upkeep costs.**
4. **It is easier to care for and requires less attention.**
5. **It is equipped with a unique safety device that reduces accidents.**

An eastern mill (name on request) writes "The chipper is paying for itself every day." Another mill in tabulated statistics shows less than .7 of 1% sawdust.

Write for further information. Our service department will be glad to show you how the new Wolf Chipper can cut costs for you.

VALLEY IRON WORKS COMPANY
Plant, Appleton, Wis.
New York Office, 350 Madison Ave.

ORDERS NUMEROUS BUT SMALL IN THE PHILADELPHIA MARKET

Printers, It Is Said, Are Placing Orders for Paper Only When They Have Received Orders for Work Themselves—Conditions in Coarse Paper Market Show Improvement—Steady and Increasing Demand Is Shown for Paper Stock—Franklin Paper Co. Moves into Its New Building at 810 Sansom Street—Improvements Recommended in Work of Department of Public Printing.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, January 16, 1923.—Spottiness in the sales of all the grades of fine printing papers during the past week, was commented upon by all in the distributing trade, but yet was complained of by none. The experiences were rather curious, a day or even a half day of quiet and even sluggishness immediately being followed by one of real, often rushing activity. The result of the week, if expressed in terms of number of orders was most gratifying, but the story was not so enthusing a one if expressed in terms of dollars and cents. It is universal opinion that the status of the market in the paper trade faithfully reflects that of its chief patron, the printing industry, because now more than ever before, printers are placing their paper orders only when they have received an order for work themselves. Apparently none of the smaller printers and very few of those of moderate or large size are carrying any stock at all.

Typical of this condition of affairs, to adduce but one illustration out of a thousand that could be offered, was the request of one of the largest and best-known printing establishments for stock to print 2,000 ordinary business cards. The paper men have no particular complaint to make about the printer, but they are calling attention to the waste and unsatisfactory condition which this small order business brings with it. They ascribe the plight in which they find themselves as being exactly that with which the printer also is surrounded. Customers have been educated to specify certain grades of paper and the printer, because of the multitude of such on the market, does not feel his way clear to stock up with any, and consequently relies on the paper distributors really to go outside his proper function of a wholesaler and actually to act as a retailer.

Of course, through the universal observance of the recently revised trade customs, an additional charge over the ream and case price is made for these small lot orders, but this addition the trade feels, does not compensate them for the additional cost and particularly for the annoyance of an avalanche of small orders, whose monetary aggregate after all is not very large. However, consolation is taken out of present market conditions since they reflect real consumption of paper by the public and since it clearly is apparent that there are on the shelves of the printers no stock on which to draw. Unquestionably the consuming market steadily is improving and the trade reaches the natural conclusion that its sales will increase in a steady and wholesome character. Nowhere is there any pessimism shown, or even an approach to it.

Coarse paper distributors found conditions improved during the week and a gain of orders considerably larger than was experienced by the fine paper trade. Up until the beginning of the week the coarse paper market was lagging a little behind, but it made during the last seven days a comparatively large gain.

Cover Stock Moving Freely

The brightest spot of the week was found in the offices of the paper stock packers. All reported a steady and while not large an entirely satisfactory demand from the mills for all grades of stock with some approach to liveliness in the market for mixed and commons and real activity in the demand for manila container stock. Quotations it is true remained unchanged, but while a week ago there was some apprehension that there might be a scaling down, no such fear was entertained during the last week. In several instances, even higher prices than the outside figures were secured by the packers from board mills who, having an eager market for their goods and depleted stock storeroom, went out into the market to get supplies to keep machines running full.

Franklin Co.'s New Home

During the past week the Franklin Paper Company, Inc., moved into its new building at 810 Sansom street, where offices and distributing departments will be located. The building is five stories, containing over 15,000 square feet, and with every up-to-the minute convenience the company can handle its fast growing business to every advantage. Other than the original walls, very little remains of the old building. The spacious basement, third, fourth and fifth floors are used for merchandise for quick delivery; the heavier and more slowly moving stock being warehoused, as formerly. The second floor is used for the executive offices, where a force of eighteen carry on the detail work of the company.

During the past four years, the company has specialized in papers and boards used chiefly in the manufacture of suit-cases and trunks and the business in these specialties has grown to large proportions both in the domestic and export departments. The company maintains a branch office in New York, with representatives in England, Cuba and Mexico. This house started business in 1910 by the president, H. A. Jacobs, together with the vice-president, H. R. Hillegas, who are, today, the principals in the organization. Mr. Jacobs in 1902, together with the late F. W. Dager and B. F. Huntsinger, established the Papers Manufactures Company of Philadelphia, with which, in 1909, Mr. Jacobs severed his connections, and started the Franklin Paper Company.

A feature of the new business home of particular value for the expeditious handling of stock is the immense elevator in the rear, believed to be one of the largest in the city. It is ten feet deep and 22 feet wide and therefore extending practically across the entire building. On it can be loaded several tons of stock at a time; in fact it is large enough to take an entire automobile. The building at 923 Locust street recently purchased by the firm will be used in part for storage.

Recommendations To Paper Distributors

Real competition among the paper distributors of Pennsylvania is forecast as a result of a survey of the work of the Department of Public Printing which has just been completed for a special budget committee at the head of which is Professor Clyde L. King of the University of Pennsylvania who, during the week, was appointed Secretary of the Commonwealth to serve in the administration of Governor-elect Gifford Pinchot of Pennsylvania when he is installed in office this week. It was prepared for the commission by John H. Williams and it makes very specific recommendations for improvements from present-day methods. It points out great waste through the present methods of the state purchase of paper separate from the printing contract and it recommends discontinuance of this custom. A number of other specific recommendations of importance to the paper distributors are made in a very lengthy report.

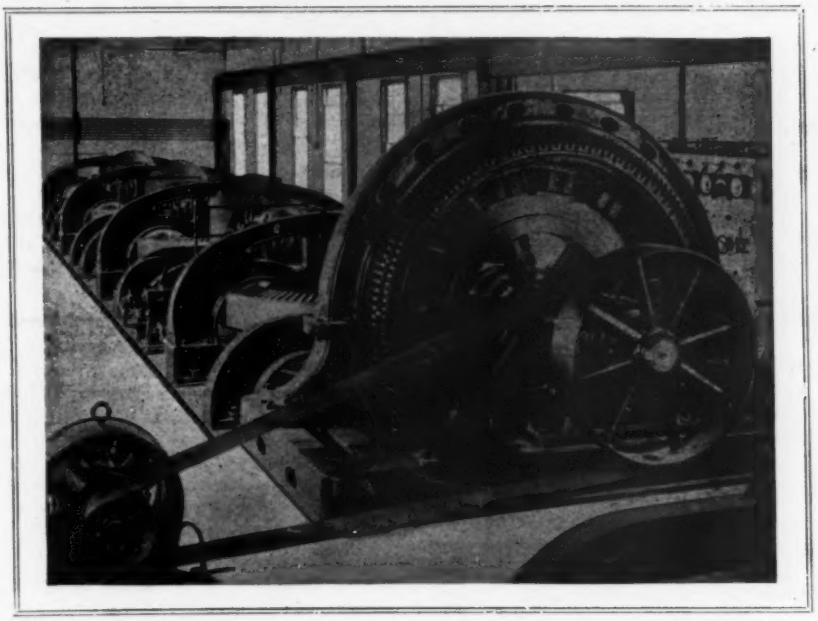
A Paper of Wonderful Character

The most remarkable piece of paper in the world, in the opinion of Lafayette Cates, superintendent of the *Farm Journal* mechanical departments, is now in his possession, but fast is disappearing and a new supply is rather problematical. It is a thin sheet that looks very much like gray case lining paper, but it has been chemically treated in a process of secret character and it is used to supplant the costly offset rolls used on rotary presses. The paper, it is

(*Continued on page 26*)

DODGE

POWER TRANSMISSION MACHINERY



One of three Dodge built units generating 4200 H. P. in Hydro-electric plant.

In this large water power plant three 500 KW, 3-phase alternators are driven by four vertical turbine water wheels. The total installation consists of three units like the one shown in the illustration having an aggregate capacity of 4200 H.P. The water wheel harness for this installation was designed, built and tested in the Dodge shops and has given unusual satisfaction for many years.

This satisfactory installation is only one among many similar ones which have built the world wide reputation of the Dodge organization as designers and manufacturers of power harness for every industrial requirement.

Dodge service stops at neither size, weight or quantity. The specification of Dodge equipment for any power transmission requirement always carries the assurance of highest quality and operating economy.

Dodge service to the paper industry includes the furnishing of every appliance necessary for the economical distribution of power. Stock products such as pulleys, pillow blocks, bearings, collars, clutches and couplings can be purchased through over five hundred local dealers on the immediate delivery basis. Complete installations, including rope drives, line shafts or water wheel harness, are designed and built under the supervision of engineers familiar with the specific requirements of the paper industry.

Submit your power problems for recommendations.

New York
Philadelphia
Pittsburgh
Boston
Cincinnati
Newark

DODGE MANUFACTURING CORPORATION

General Offices: Mishawaka, Ind. Works: Mishawaka, Ind. and Oneida, N. Y.

Dodge Manufacturing Company of Canada, Ltd., Toronto and Montreal

Chicago
Atlanta
Minneapolis
St. Louis-Houston
Seattle
San Francisco

ORDERS NUMEROUS BUT SMALL IN PHILADELPHIA MARKET

(*Continued from page 24*)

understood, is made in Germany, but was imported into this country from Belgium by a firm in Boston which advises that present stocks completely are exhausted and that under the most favorable condition, manufacture of it will not be resumed until spring. Mr. Cates is of opinion that the first use of this paper on a color press is now being made in the pressroom of the Farm Journal Company, although it has been used successfully for some time on the black presses of Ginn & Co., Boston's widely known text book printers where its operation first was observed by Mr. Cates. In the ordinary rotary printing process, a continuous off-set paper roll is used, but after a considerable run becomes so filled up with ink that it no longer is effective in preventing off-set or smudge and must be discarded. These rolls are rather costly, varying in price from about $75 to over $100 each, depending on width and length. Instead of this expensive roll, the *Farm Journal* is now using a few yards of this new paper, christened by Mr. Cates, "The Wonder Paper" and at a cost of between $1 and $2, the new paper costing less than 40 cents a pound. After a short run, the "Wonder Paper" takes the color of the form, but thereafter seems to remove no ink at all from the printed page and absolutely to prevent the slightest smudge and more over, it never becomes tacky or sticky. Though only a small quantity was available, the Farm Journal Company has endeavored to conserve it, but there is little left on hand and a new supply is eagerly awaited. Meanwhile, samples have been submitted to a well-known American mill in the hope that American ingenuity can equal or surpass this wonderful "made in Germany" product.

Melchior Bros. Expand

Melchior Brothers, who two years ago began their business history on the sixth floor of the Drexel Building in a small way and who last year removed to the larger office, 364 Drexel Building, with the opening of the new year, acquired still larger quarters and new location on the first floor of the same building. They are occupying Suite 118, consisting of three offices and providing for triple business capacity. The firm consisting of Paul and William Melchior, deals in glassine, plain and embossed and in color papers, and also carries a line of plain and printed sealing tapes and specialists. Further expansion is contemplated in the firm's lines through the acquisition of larger mill representation for similar stocks.

New Sayford Lines

As representative co-jointly of the Sayford Paper Specialty Co., whose plant is at Vineland, N. J., and of the correlated Frank M. Sayford Company of Brooklyn, N. Y., which recently acquired the specialty printing and embassing department of the Robert Gair Company of New York, Phillip J. McCoy, Philadelphia representative of the two Sayford concerns is developing a new sales field through his Philadelphia offices at 269 Drexel Building consequent on the added lines which come through the Gair department. These consist of signs, both for counter and window, display cards, art metal signs, all kinds of seals on paper and other media, labels and menu cards, both embossed and printed on cardboard and made of paper with metallic effects. The products of the Sayford Paper Specialty Company include finger bowls, ice cream dishes, paper caps for druggists, baking dishes, and other cooking utensils, all manufactured at the Vineland headquarters, while the products of the Sayford Company of Brooklyn consist of paper doilies, lace strips for box manufacturers and other lace paper specialties. The territory now included in the Philadelphia sales district takes in Pennsylvania, southern New Jersey, Delaware, Maryland, Washington, Virginia and West Virginia. One of the newest products which is being introduced in the Philadelphia district is a line of crepe embossed paper napkins and there is also a large demand being developed for the new heavyweight paper butter chips, which the firm is producing. George J. Dugan has been added to the Philadelphia sales force.

Reading Paper Mills All Running

After being closed down for an entire year, the rope mills of the Reading Paper Mills Company of Reading, Pa., whose Philadelphia headquarters are located at 308 Chestnut street, again is in full operation. During the close down, extensive improvements in building and mechanical equipment were made and provides for a capacity of 8,000 pounds per every twenty-four hours. The mill is manufacturing unbleached Fourdrinier rope paper used in the manufacture of sandpaper. With the opening again of the rope mills, the three Reading branches of the Reading Paper Mills are now again in full swing. They are the Reading and Packarack Mills which are manufacturing a line of high grade rag book papers and the Tulpehocken Mill which manufactures rope papers. The Philadelphia sales headquarters is under the management of Samuel Thompson, who for almost a quarter century has been connected with the firm.

500 Attend Certificate Bond Meeting

A record-breaking attendance assembled Monday evening of this week in the Roof Garden banquet room of the Hotel Adelphia as guests of the Charles Beck Company and of the Thomas W. Price Company, Philadelphia distributors of the widely known Certificate Bond, made by the Crocker-McElwain Company, attracted by the program of good things to eat and of good things to hear which had been arranged for them. Reservations had been made about the multitude of small dining tables scattered through the room for 500 guests and nearly every place was occupied, when, as toastmaster, Leon Beck called the meeting to order. He faced an audience made up very largely of the men from the pressrooms of printing establishments of Philadelphia and the larger cities of Pennsylvania, east of Harrisburg and of lower New Jersey—a group of the men who most directly and intimately come into contact with paper as converters of it into printed matter. After a brief, but always snappy interesting and informative meeting, all who desired were given the opportunity of visiting the pressroom of the William F. Fell Company, whose president sat at a place of honor at the speaker's table and there Frank J. Roch, practical pressman, gave an actual demonstration of the wonderful adaptability of Certificate Bond for the printing of halftones. Mr. Roch was the concluding of the two speakers who enthused the audience. Charles H. Barr, head of the sales promotion department of the Crocker-McElwain Company, in a catchy discursive way, told the story of the ideals of the company in the manufacture of this paper and particularly of its distinctive quality of having both sides alike. By means of a blackboard and chalk demonstration, he visualized as his spoken remarks intensified the highlights of the Certificate Bond appeal to printers, engravers, lithographers and all other converters of paper. These, he said, were its printability, formation, printing on both sides, lying flat, uniformity, strength, color and service. Mr. Barr exhibited many specimens of Certificate Bond work and gave many practical suggestions of how the printing trade, which was not now cashing in on Certificate Bond, could do so.

Mr. Roch, who long was a Philadelphia pressman and has a wide personal acquaintanceship here, made direct application of Mr. Barr's statements to his fellow workers in the pressroom. He called attention to the fact that, while costly delays often experienced in make-ready were attributed to worn type, faulty electros, unsuitable ink and a variety of other causes, a majority of the delays really were due to the paper itself. He described Certificate Bond as being an absolutely "dead level" sheet which he illustrated

(*Continued on page 32*)

The New York & Pennsylvania Co. operates eight Edge Moor Boilers totalling more than 3000 H. P., two of which are shown above.

How do your boiler room costs affect the prices your salesmen quote?

DO high operating costs make it difficult for you to meet competitors' prices? Do your salesmen complain of too high a list?

No phase of manufacturing has a wider influence on operating costs than the boiler room, and the degree of efficiency with which it is run. Waste in the boiler room, usually due more to antiquated or inadequate equipment than to inefficient labor, affects, to a surprising extent, every other manufacturing cost. Conversely, savings effected here are reflected through the whole plant.

There is no department where bigger economies can be obtained with less investment for equipment than in the boiler room.

Are *your* boilers economical? Do they produce all the power you need, dependably, safely, with the lowest possible operation and maintenance costs?

Edge Moor Water Tube Boilers are built to render the utmost in service. The purchase price is soon absorbed by extended economies in fuel and maintenance.

EDGE MOOR IRON COMPANY
Established 1868
EDGE MOOR, DELAWARE

New York
Chicago
Boston
Pittsburgh
Charlotte
St. Paul

EDGE MOOR Water Tube BOILERS

FOR INCREASED FUEL ECONOMY

GOOD OUTLOOK REPORTED IN TORONTO PAPER MARKET

Demand Is More Active Than a Year Ago and Is Expected To Show a Steady Expansion from Now On—Prices Show a Strengthening Tendency Although no Appreciable Increase Is Expected Before the Spring Months—Toronto Members of the Canadian Paper Trade Association Meet to Discuss Business Conditions—Whalen Pulp and Paper Mills May Manufacture News Print.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ont., January 15, 1923.—The new year has started off well in the paper business, and buying is reported by most jobbers as being on a larger scale than a year ago. Orders are being placed more freely, and it is expected that, by next month, everything will be in full swing. There is a tendency for prices to strengthen although it is not expected, according to authoritative sources, that there will be any appreciable increase before the spring months. Some slight readjustments may take place, but stabilization is the motto and watchword of the trade at the present time. The mills are getting busier and, with livelier purchasing on the part of consumers, there is little doubt but that 1923 will prove to be a year of steady development and satisfactory turnover. Groundwood pulp is still scarce and high in price, and a very large amount of pulpwood is being taken out in New Ontario in preparation for the demand which, it is believed, will develop within the next few months.

Paper Box Co. Holds Convention

The first annual convention of the Rudd Paper Box Company, Toronto, was held recently at the King Edward Hotel, Toronto. The motto of the firm is "Packages That Make Sales." W. P. Bennett, president of the company, presided. A number of practical addresses were given by leading members of the organization and in the evening, with the ladies in attendance, there was an enjoyable dinner given to all by Mr. and Mrs. Bennett, which was followed by a theatre party.

Pulpwood Company Elects New Officers

At the annual meeting of the Thompson & Heyland Company, Toronto, which is a large purchaser and exporter of pulpwood, James Thompson was re-elected president and A. J. Bailey, former secretary-treasurer, was made vice-president to succeed the late E. R. Heyland, who passed away a few months ago. A. E. Breckenridge was elected secretary-treasurer, succeeding Mr. Bailey. The company is shipping out large quantities of pulpwood to New York, Pennsylvania and other states on contract for the present year and already some twenty thousand cords have gone forward.

Pulpwood Cut in Ontario

According to figures compiled by the Department of Lands and Forests for Ontario there was cut in the province last year on Crown lands 289,113 cords of pulpwood and over 300 000,000 feet of lumber. The area covered by timber and pulpwood operators under license at the end of the fiscal year was 17,289 square miles. The territory will be much greater this season as several concessions have been recently disposed of.

Good Outlook for Paper Trade

The first regular meeting in 1923 of the local members of the Canadian Paper Trade Association was held in Toronto last week. There was a good attendance and the prospects of business for the coming year were discussed. It was agreed that there was every indication of a steady growing demand, and the hope was expressed that values were now stabilized and orders could be placed ahead with every confidence that few price changes would take place. C. W. Graham, of Hamilton, former president of the association, was among those present and reported the outlook in his city as being bright.

Whalen Mills Have New Plans on Foot

The Whalen Pulp and Paper Mills, whose mills are located in British Columbia and of which organization Hon. T. W. McGarry, of Toronto, is president, are said to have plans under way for the manufacture of news print. The financing of such development is said to be holding up the annual statement of the company for the last fiscal year, which was due some months ago. The directors hope to present the expansion and financing plans to shareholders at the same time as the report is placed before them. The company is finding an excellent market for its sulphate pulp and operations are believed to be on a profitable basis.

Mattagami Co. Reports Better Demand

The Mattagami Pulp and Paper Company, whose head offices are in Toronto and mills at Smooth Rock Falls, Ont., reports a better demand for easy bleaching sulphite. Sales are progressing satisfactorily, and the plant, now operated at capacity, is reducing high cost inventories. The existing supply of wood of the company was obtained at a cost which does not, as yet, enable it to convert the product into pulp and sell at a profit. The recent increase in selling figure for sulphite pulp, however, makes it possible for the organization, which has for many months been in the hands of a receiver, to turn out its product at a level more nearly approaching current market value of its inventories of wood. It is stated that, when liquidation of the present inventories is completed and new wood is obtained at the lower costs now prevailing, the Mattagami Company should be able to make a reasonable profit if selling prices show improvement which may be expected, in view of the growing activity in all branches of the pulp and paper business.

Notes and Personals of the Industry

E. H. Wilkinson, head of the Wilkinson Paper Company, Toronto, has been elected president of the Empire Club, of Toronto, which has over two thousand members.

T. J. McFadden, Ontario representative of the Diamond State Fiber Company, Toronto, recently suffered bereavement through the death of his father in Lindsay, Ont.

A. A. Cullen, of Miller Brothers, manufacturer of board, Glen Miller, Ont., was in Toronto recently. The company is making several improvements to its mill and addition to the power house. The output will be increased.

O. H. Moore, manager of the Hinde & Dauch Paper Company, of Canada, has returned to Toronto, after a business trip to New York and other points east, and speaks hopefully of the outlook for trade.

William R. Young, who was one of the founders of the Regal Paper Box Company, 126 John street, Toronto, has sold out his interest in the company and has withdrawn. His successor is A. Manchester, who has been elected president and managing director. Mr. Young, in association with his brother, intends establishing a set-up and folding paper box plant on Ryerson avenue under the name of Young Brothers.

Among the callers on the Toronto paper trade during the past week were H. L. Wilson, head of the Winnipeg Envelope Company, Winnipeg, and the Pioneer Envelope Company, Vancouver; M. F. Montague, manager of the sales department of the Standard Paper and Manufacturing Company, New York City, and Isaac A. Wilcox, of the Smith Paper Company, Lee, Mass.

James Thompson, of the Thompson and Heyland Company, Toronto, large exporters of pulpwood, has returned from a visit to the pulp and paper mills in Pennsylvania.

A charter has been granted to the Millwood Lumber Company of Sault Ste. Marie, Ont., with a capital stock of $40,000, to carry on the business of lumbering, pulp and paper. George A. Montgomery and Edgar B. Barber are among the incorporators.

FOR QUALITY PAPERS
USE

A-1 Bleached Sulphite Pulp

MANUFACTURED BY

Kellner-Partington Paper Pulp Co., Ltd.
Borregaard **Norway**

SOLE AGENTS FOR U. S.

J. Andersen & Co.

21 East 40th Street **New York, N. Y.**

WAYAGAMACK

KRAFT PULP

Uniform in Quality
Essential for Strength Requirement

The Pulp and Paper Trading Company

21 East 40th St., New York, N. Y.

Sole Agents for United States for:
CANADIAN KRAFT, Ltd. **Three Rivers, CANADA**

PRODUCTION OF WOOD PULP FOR THE MONTH OF NOVEMBER

According to Figures Just Issued by the Federal Trade Commissions There Were on Hand at the Domestic Mills at the End of the Month Seventeen Days' Average Output of Ground Wood, Eight Days' Average Output of News Grade Sulphite and Six Days' Average Output of Bleached Sulphite, Easy Bleaching Sulphite and Mitscherlich Sulphite Pulp.

[BY OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 10, 1923.—In connection with the Federal Trade Commission's statistics of the paper industry, a summary of the monthly reports from manufacturers of wood pulp and other kinds of pulp used in paper making is submitted herewith for November, 1922. The table shows the kind of pulp, the stocks, production, pulp used and shipments for the month. The pulp shipped during each month represents only pulp shipped to a concern different from the one producing it. Loss of production is shown by giving the idle time reported by each company for each kind of pulp.

Pulp Production

The following is a tabulation of the production, pulp used by the company producing it, shipments to outside concerns and stocks of finished pulp in tons of 2,000 pounds on an air-dry basis, for November, 1922, compared with November, 1921, for the operating mills. The average production is based upon the reports covering the years 1917 to 1921, inclusive, and the average stocks are based upon the stocks carried for the years 1919, 1920 and 1921.

	Number of Mills	On hand 1st of month	Production for month	Used during month	Shipped during month	On hand end of month
		Net tons	Net tons	Net tons	Net tons	Net tons
Ground Wood Pulp:						
November, 1922	159	95,339	120,143	123,800	11,470	80,212
November, 1921	164	119,406	108,186	103,167	9,062	115,363
November, 1920	161	94,150	139,535	114,757	10,399	108,529
November, 1919	170	126,315	147,672	119,103	14,833	140,051
Average			115,150			147,073
Sulphite, News Grade:						
November, 1922	59	18,640	62,209	55,711	5,470	19,668
November, 1921	65	22,442	59,392	51,057	9,134	21,643
November, 1920	63	17,139	70,888	62,362	8,631	17,034
November, 1919	65	19,799	68,699	56,494	10,569	21,435
Average			60,125			20,685
Sulphite, Bleached:						
November, 1922	32	5,816	45,475	27,711	14,355	9,225
November, 1921	32	4,581	45,961	21,561	23,831	5,150
November, 1920	32	4,448	49,932	27,333	22,666	4,381
November, 1919	31	9,468	46,139	23,601	23,409	8,597
Average			39,800			9,507
Sulphite, Easy Bleaching:						
November, 1922	7	1,344	4,921	4,540	190	1,535
November, 1921	8	639	4,170	3,140	828	841
November, 1920	6	761	4,821	3,074	1,316	1,192
November, 1919	8	1,731	5,984	3,791	2,402	1,522
Average			6,000			1,346
Sulphite, Mitscherlich:						
November, 1922	7	2,139	6,202	4,130	2,693	1,518
November, 1921	6	1,064	5,655	3,434	2,220	1,065
November, 1920	7	1,142	6,930	4,092	2,353	1,627
November, 1919	7	1,359	6,283	3,310	2,358	1,974
Average			6,125			1,831
Sulphite Pulp:						
November, 1922	23	6,745	22,736	15,463	8,813	5,205
November, 1921	21	7,409	17,229	12,887	3,772	7,979
November, 1920	21	4,758	16,518	12,391	1,810	7,075
November, 1919	22	7,081	17,144	10,375	6,070	7,780
Average			13,050			6,499
Soda Pulp:						
November, 1922	27	6,546	37,364	22,082	14,933	6,895
November, 1921	27	6,281	30,332	17,092	13,215	6,306
November, 1920	28	5,826	37,076	19,499	16,465	6,938
November, 1919	27	7,338	31,709	18,288	13,511	7,248
Average			29,800			6,931
Other Than Wood Pulp:						
November, 1922	7	362	1,696	877	596	585
November, 1921	5	15	862	589	80	208
November, 1920	4	238	341	224	163	192
November, 1919	6	228	858	725	81	280
Average			800			154
Total—for all Grades:						
November, 1922		136,931	300,746	254,314	58,520	124,843
November, 1921		161,837	271,787	212,927	62,142	158,555
November, 1920		128,462	326,041	243,732	63,808	146,968
November, 1919		173,319	324,488	235,687	73,233	188,887
Average			270,850			194,026

Total stocks of all grades of pulp in the mills on November 30 amounted to 124,843 tons. Mill stocks of ground wood pulp, mitscherlich and sulphate pulp decreased during the month; stocks of all the other grades increased.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic pulp mills at the end of the month with their average daily production based on the reports covering the years 1917-1921, inclusive, the figures show that:

Ground wood pulp stocks equal 17 days' average output.

News grade sulphite mill stocks equal 8 days' average output.

Bleached sulphite mill stocks equal 6 days' average output.

Easy bleaching sulphite mill stocks equal 6 days' average output.

Mitscherlich sulphite mill stocks equal 6 days' average output.

Sulphate mill stocks equal 10 days' average output.

Loss of Production

MONTH OF NOVEMBER, 1922, (WITH NOVEMBER, 1921, FOR COMPARISON)

Grade	Lack of Orders		Repairs		Other Reasons		Total	
	1922	1921	1922	1921	1922	1921	1922	1921
Ground Wood Pulp:								
Number of grinders	16	41	169	138	554	572	739	751
Total hours idle	5,785	10,753	17,811	14,768	223,746*	143,836	147,342	169,357
Sulphite, News Grade:								
Number of digesters	8	20	5	17	8	8	21	45
Total hours idle	4,262	2,930	33	875	1,378	1,108	5,673	4,913
Sulphite, Bleached:								
Number of digesters	27	14	32	8	25	6	84	28
Total hours idle	1,512	1,536	1,547	628	270	248	3,329	2,512
Sulphite, Easy Bleaching:								
Number of digesters	0	5	0	0	0	3	0	8
Total hours idle	0	480	0	0	0	510	0	990
Sulphite, Mitscherlich:								
Number of digesters	0	0	0	0	9	16	0	16
Total hours idle	0	0	0	0	48	1,829	48	1,829
Sulphate Pulp:								
Number of digesters	1	15	11	0	0	8	12	23
Total hours idle	51	866	964	0	0	308	1,015	1,174
Soda Pulp:								
Number of digesters	0	75	0	0	22	37	22	112
Total hours idle	0	10,460	0	0	3,076	2,921	3,076	13,381
Other Grades:								
Number of digesters	2	2	0	0	4	2	6	4
Total hours idle	608	944	0	0	936	552	1,544	1,496
Total number of machines	54	172	217	163	622	652	893	987
Total hours idle	12,218	27,969	20,355	16,271	129,454	151,312	162,027	195,552

*Includes 116,327 hours due to water and power conditions.

48,000 Foot Pounds

Eliminated on one Fourdrinier Wire
That Was Equipped
With

"BELOIT SPECIAL"
Table Roll Bearings

BELOIT IRON WORKS
BELOIT, WISCONSIN

Trade-Marks Department

CONDUCTED BY NATIONAL TRADE-MARK CO., WASHINGTON, D. C.

The following are trade-mark applications pertinent to paper and pulp field pending in the United States Patent Office which have been passed for publication and are in the line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, Barrister building, Washington, D. C., or Bush building, 130 West Forty-second street, New York, trade-mark specialists.

As an additional service feature to its readers, the PAPER TRADE JOURNAL gladly offers to them an advance search free of charge, on any mark they may contemplate adopting or registering.

SHIELD—No. 169,040. Union Bag and Paper Corporation, Jersey City, N. J., and New York City. For paper bags.

BOLSCO—No. 167,346. Buffalo Office and Law Supply Company, Inc., Buffalo, N. Y. For paper, stationery and miscellaneous office supplies.

ANGLO-SAXON BOND—No. 168,306. Hampshire Paper Company, South Hadley Falls, Mass. For printing and writing paper.

MAJOR—No. 168,921. Coy, Hunt & Co., New York City. For paper, namely, wrapping, bond, writing, tissue, printing, etc.

"RITE-O-PAD"—No. 171,202. Commercial Appliance Company, Los Angeles, Calif. For writing pads.

ROYAL SCOTCH—No. 171,116. American Writing Paper Company, Holyoke, Mass. For writing and printing paper.

MAGNETIC BOND—No. 169,981. The Miamisburg Paper Company, Miamisburg, O. For writing paper and envelopes.

TELLER BOND—No. 152,007. The Forman-Bassett Company, Cleveland, O. For paper, both plain and safety.

WATERWAY—No. 171,356. For Howard Paper Company, Green Bay, Wis. For toilet paper, paper towels, napkins and tablecloths.

SODRI—No. 171,354. Fort Howard Paper Company, Green Bay, Wis. For toilet paper, and paper towels, napkins and tablecloths.

ORDERS NUMEROUS IN PHILADELPHIA

(*Continued from page 26*)

on the blackboard to mean one which had no high and low spots and, therefore, one which would take halftone or type impression with the very minimum of make-ready preparations. He urged the printers in their own interest and in the interests of their customers to affect economy by standardizing on their paper requirement and, of course, by using Certificate Bond for all the jobs requiring a bond paper.

While several score of those in attendance left the banquet room for the Fell pressroom, so many requests from others unable to make the inspection on Monday night were received that Mr. Roch's demonstration was continued on Tuesday morning.

Personal and Business Notes

Congratulations are due and receivable by Colonel Charles Fancier Carter of the MacAndrews & Forbes Company, Gloucester, on his capture last week at Grand Junction, Tenn., of the first prize in the all-American amateur setter dog field trial. The prize winner was Colonel Carter's dog, Maid's Eugene.

Simon Walter, head of S. Walter Company, Inc., 144 North 5th street, and member of City Council, returned during the week after a ten days' trip through the Western and Southern paper mill districts. On his return home, he stopped over at White Sulphur Springs for relaxation.

Spurgeon Spangler of the Smith & Ault Co. of York, Pa., was a visitor to the Philadelphia markets in the interest of the firm's line of board and bogus.

Joseph P. Luke identified with the Luke family well known in the paper manufacturing trade of Delaware, was married on January 10 to Miss Dorothy Pitts Smith of Chadd's Ford, Pa., at the bedside of the bride's father, who is seriously ill. Mr. Luke is a son of Mrs. Bessie H. Luke of Wilmington.

After the first of the month the new board lining machine which Shryock Brothers, 924 Cherry street, recently installed, will be placed in operation and ready for the lining of both box board and binders for the box making and book binding trades. It will have a production of seven tons per day. The machine is of foreign make and recently was imported by the firm, and will be operated by gas power.

His one hobby of winter sport, attracted to Lake Placid, recently Charles J. Beck of the Beck Machine Company, 6th and Chestnut streets and though he returned last week, his name remained behind, because the Beck Trophy for skiing, both jumping and cross-country is one of the most contested for prizes at this great outdoor mid-winter meet.

One of the newest devices of the Beck Machine Company is a register for regulating the cutting of paper in rolls where there is text matter or designs imprinted on the rolls, and which permits of a retarding or acceleration of cutting while the machine is in motion. It is being sold in conjunction with the Beck paper cutting machines.

The annual dinner of the Philadelphia Paper Box Manufacturers' Association will be held on January 30 at a place not yet decided upon. The committee in charge of the dinner and entertainment of the evening consists of Walter Deisroth, William K. Jeffries of the Peerless Paper Box Company and Edwin A. Lee of the Lee Paper Box Company.

News of the Boston Trade

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., January 15, 1923.—Bad weather conditions of the past week continue to make transportation difficulties one of the chief worries of the Boston paper merchants. Acute shortage of cars, embargoes on certain lines and snowbound roads are hampering the delivery of orders to and from the paper men. In spite of these difficulties paper men report good business so far this month. No changes in prices have been reported in Boston market for some little time. When they do come it is believed that they will be upward even though slight. These increases will undoubtedly be due to labor conditions at mills, it is believed.

Reports of increases in wages in Maine mills and in certain Holyoke mills lead Boston merchants to look for increase in prices in the near future. News print market continues to hold up with no slackening of demand.

Dealers in paper making rags report that prices in rags have dropped in the same proportion that prices in other paper stock has declined in the past few weeks. In spite of this decline several Boston dealers continue to advertise for old papers and other stock.

Robert Wright, recently connected with the Arnolds-Roberts Company and formerly connected with the Boston office of the Whitaker Paper Company before it gave up its Boston affiliations, is now connected with the W. H. Clafflin Company on Summer street. He will have charge of the fine paper department recently vacated by H. L. Goodman.

Chatfield Paper Co. Occupy New Offices

NEW HAVEN, Conn., January 15, 1923.—The Chatfield Paper Company's new building and offices will be ready to open for business about February 1.

With the completion of this project, New Haven can boast of a paper warehouse equipped second to none.

Established in 1872 and incorporated in 1895 this company had consistently won the good-will of its increasing clientele.

The new warehouse and offices are more centrally located for the wholesale trade than heretofore. The exterior main offices will be finished in gray stone, main entrance faces the corners of two streets. Every modern conveniences is being installed that will assist efficiency in service.

Until the definite opening temporary offices are being maintained at 253 State street, across from their new building 233-239 State street, foot of Crown.

Let Them Drink to your business health in cups you sell

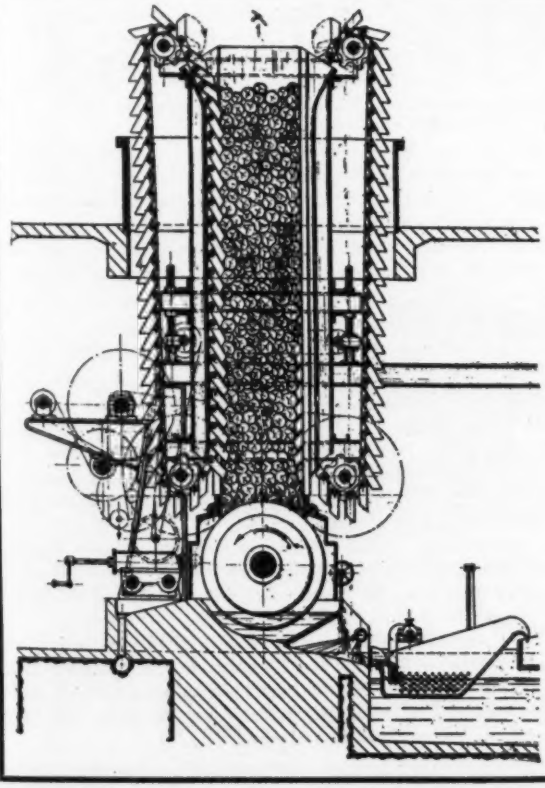
each drink a cup—each cup a sale for you and at lowest cost of any cup on the market.

At such prices SALES RESISTANCE IS NEGLIGIBLE and our direct advertising assistance in your city will get immediate results as it is now doing in many cities.

Burt's Paper Drinking Cups are made of fine white paper, without wax to make drinks taste, and are reinforced so holders are not necessary. They are kept under glass and cannot be wasted or soiled before use.

Cups retail at one fourth cent—dispensers at five dollars.

F. N. Burt Company, Ltd.
Paper Cup Division
Buffalo, N. Y.



Voith
Caterpillar Grinder

an evolution from Voith's Magazine Grinder

"The Machine of Today"

"CONTINUOUS PROCESS"

Grinds Pulp at an average of 45 Horsepower per Ton, makes better grade pulp.

20 to 22-Ton Production per unit

PATENT APPLIED FOR
Patented in Canada

Ask for Particulars.

F. O. B. Manitowoc, Wisconsin, U. S. A.
Brantford, Ontario, Canada

American Voith Contact Co.

280 Madison Avenue **New York**

Obituary

Charles T. Askew

Los Angeles, Cal., January 10, 1923.—Chas. T. Askew, a former employee of the Zellerbach Paper Company, died December 31, after having been confined to his home with paralysis for some four years.

Chas. T. Askew was born in Raleigh, N. C., November 30, 1858. He was a school mate of the Honorable Josephus Daniels and the Honorable Locke Craig of North Carolina. He attended the University of North Carolina, leaving in 1878 to join his father, Colonel Wm. F. Askew, in the manufacture of paper at the Falls of Neuse, near Raleigh. In later years he became affiliated with the sales department of A. G. Elliott & Co. of Philadelphia, traveling through

Chas. T. Askew

the Southern States, after which he joined the organization of J. Q. Preble & Co., and J. B. Sheffield & Son, both of New York.

In the year 1892, he, in company with Henry N. Dewey, formed a partnership under the name of Dewey & Askew, wholesale paper dealers. It became necessary for Mr. Askew to purchase the interests of his partner, and he conducted the business by himself until 1898.

In 1905 he came to the Pacific Coast, and since then and up to the time of his indisposition he was connected with the Zellerbach Paper Compay, first in San Francisco and afterwards in Los Angeles.

Mr. Askew was one of the best-informed men in the paper business during his time. He was a conscientious worker and a loyal employee, and made, during the years of his activity, a host of friends both for himself and for the institution he represented.

He died in Sierra Madre, California, and was buried in Altadena, at the foot of the Sierra Madre Mountains.

He is survived by his wife, Edith Askew, and his son, Charles Askew.

John Ford

Mottville, N. Y., January 15, 1923.—John Ford, a paper maker of Owls Head, N. Y., died on Wednesday evening, January 10th, after a brief illness with pneumonia.

Mr. Ford was born near Manchester, England, June 30, 1839, and served a seven years' apprenticeship to paper making in Glossop, England, going to Canada in 1862. He continued paper making for a time with his father, John Ford, Sr., at Belleville, Ont.; later with Sills Brothers at Frankford, Ont. He then went to the Riordan Paper Mills at Merriton, Ont., and from there to the J. C. Wilson Paper Mills at Lachute, Que. His last position was with the Malone Paper Company as superintendent of its ground wood mill. This position he relinquished after thirteen years' service, at the age of 76 years, and has lived in quiet retirement since.

He leaves a family of twelve children—five daughters and seven sons—thirty-eight grandchildren and seven great grandchildren. Six of the sons are paper makers. The funeral took place at Titusville, N. Y., January 13, 1923.

William La Forest Rogers

[FROM OUR REGULAR CORRESPONDENT.]

Boston, Mass., January 15, 1923.—William La Forest Rogers, former division superintendent of the Great Northern Paper Company, with headquarters in the Moosehead section, died at the home of his son, William F. Rogers, in Braintree, Saturday, January 13. Mr. Rogers was widely known in Maine, where he had spent much of his life and had been closely allied with the lumber interests.

He started lumbering when he was 19, and became notably successful as a river driver. He was selectman of Greenville, Me., for two years, county commissioner for six years and chairman of that body for two years. Previous to that he was for ten years division superintendent of the Great Northern Paper Company. He was closely associated with the Applachian Mountain Club, building its log camps in Pinkham Notch, N. H.

S. B. Behrens Made Vice-Pres. of Heffernan Paper Corp.

Announcement is made by the James P. Heffernan Paper Company, Inc., paper exporters of New York, that as of January 1, 1923, S. B. Behrens has been elected vice-president and director of the company.

The James P. Heffernan Paper Company, Inc., is one of the leading and oldest established American paper export firms, occupying the entire building at 25 Water street, New York, and doing a large export business in fine and coarse papers and paper specialties and handling the products for export of some of the largest paper mills in the country.

S. B. Behrens started with the company more than ten years ago, and has gone up from the ranks to his present position through his aggressiveness and close attention to the interests of the company's affairs.

Robert J. Glenn who has been connected with the company for over 30 years, was re-elected president and director of the company.

Fire Razes Miller-Tompkins Warehouse

Starting at 9 o'clock on the night of Saturday, January 13, a five-alarm fire demolished the seven-story loft building occupied by Miller, Tompkins & Co., manufacturers of paper bags, at 481-87 Washington street, between Spring and Canal streets. The conflagration was not completely extinguished until late the following night, quantities of special bags and paper stock smoldering after the flames had been quenched.

The disaster was spectacular in the extreme. Early Sunday morning hundreds of pedestrians gathered around to watch firemen wield spray lines from the ice-clad fire escapes. Six of the flame fighters narrowly escaped death.

All that remains of the building is a twisted, wrecked shell, stripped to four walls. Miller, Tompkins & Co. announce that they will start up again as soon as they can find a suitable location, preferably in the same neighborhood in order that they may have ready access to railroads and piers.

Concentrate

On one good, established quality line of bags and you save capital, time, worry, warehouse space.

Our Kraft Bags are made out of the highest quality No. 1 Pure Sulphate Kraft Paper.

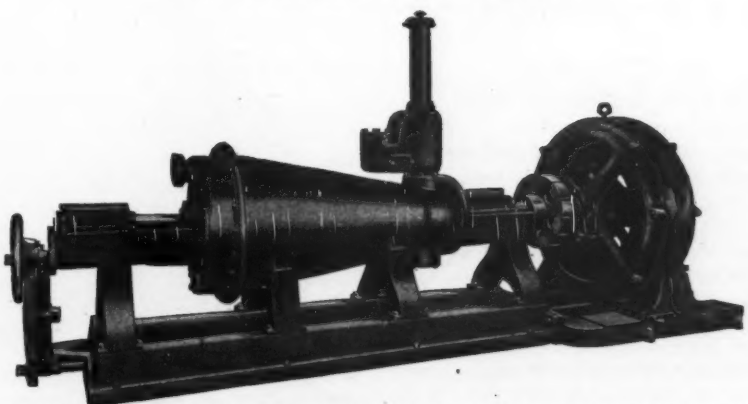
LAWRENCE GROCERS' BAGS

Our White Bags are made out of the highest quality Slow-cooked Mitscherlich Spruce Sulphite paper.

James Lawrence, President THE LAWRENCE BAG CO. Miamisburg, Ohio

E. D. JONES & SONS CO.

PITTSFIELD, MASS.



Jordan Engines, made in four sizes, either belt or direct connected motor driven

Manufacturers of

Paper Making Machinery

To Work Out Eddy Paper Corp. Stock Apportionment

[BY OUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., January 15, 1923.—Apportionment of the stock of the Eddy Paper Corporation of Illinois to the holders of the common and preferred stockholders of the Eddy Paper Company of Michigan is to be worked out by a committee, which will be empowered to report at a stockholders' meeting to be called at at a later date.

That was the main accomplishment of the stockholders' meeting of the Michigan corporation, held Thursday in Three Rivers, according to information furnished by Charles A. Blaney, president.

The committee, which is said to be representative of the holders of both classes of securities in the Michigan company consists of Thomas W. Cavanaugh, Paw Paw; Harry C. Howard, Kalamazoo; Joseph W. O'Brien, Grand Haven; Howard Lindsey, Three Rivers and Howard H. Buckhout, Kalamazoo.

According to the provisions of the purchase of the assets of the Michigan corporation, the Eddy Paper Corporation of Illinois assumed all indebtedness of the Michigan company and in addition agreed to exchange 31,250 no par value shares in the new company for 700,000 shares of common and 175,000 shares of preferred in the old company.

While it is generally admitted in financial circles that the deal consumated was the only move possible whereby debts could be met and the stockholders receive anything, there has been much lively discussion regarding the rights of the common and preferred stockholders. One element has advanced the opinion that common and preferred should share and share alike. In that case one share of stock in the Illinois corporation would be given in exchange for 28 shares of the old company.

Another element, largely representative of those buyers who invested during the intensive sales campaign of the seven per cent preferred stock declare openly that they have priority rights as to assets. These represent holdings ranging in lots of 50 to 500 shares and are scattered throughout southwestern Michigan, especially in Kalamazoo and the nearby fruit belt, in Van Buren and Berrien counties. Some of the preferred stockholders declare their holdings entitle them to all the available assets of the defunct Michigan company.

These are problems that must be worked out by the apportionment committee. There is every indication that the next special meeting of the stockholders to hear this report will be an interesting occasion.

Boxboard Products Co. Completing Plant

[FROM OUR REGULAR CORRESPONDENT.]

SAN FRANCISCO, Cal., January 8, 1923.—First of the large plants in the new industrial district south of Islais Creek, work is now being completed on the new factory of the Boxboard Products Company on Paul avenue, Bayview.

R. J. Gruenberg, president of the Boxboard Products Company, says the district is ideal for large industrial plants.

"The Boxboard Products Company, which has been financed by San Francisco men, is erecting a reinforced concrete factory, the first unit, on a site of 7½ acres, which it will eventually cover," he says. "Having water, rail and highway connections and being within 12 minutes' ride from the center of the city, this site has advantages second to none as an industrial location.

"The Boxboard Products Company will manufacture paper boxes of all kinds, egg cases, fillers, egg cartons and specialties. More than 1,000 feet of sidetrack is available for bringing the raw material to the plant, while facilities are in readiness for delivery by freight car or truck.

"The most modern automatic machinery, including a complete color printing plant, has been purchased to effect economy and efficiency in operation. Our plant operation will keep in San Francisco a larger tonnage than has heretofore gone East and will add materially to San Francisco's payroll."

Mr. Gruenberg has been identified with the folding paper box industry for more than fifteen years. David Sahlein is sales manager of the company, and C. F. Raynaud, superintendent.

Nilsen, Lyon & Co., Inc., Move

Nilsen-Lyon & Co., Inc., well-known importers of pulp, have moved their offices from 140 Nassau street, New York, to more commodious quarters in the new Bowery Savings Bank Building, 110 East 42nd street, New York. Their new location is directly opposite the Grand Central Terminal and is most convenient to visitors

STANLEY C. WILLEY

to New York. Attractive offices have been fitted up on the eleventh floor in their new location. Stanley C. Willey, secretary and treasurer of the company, has long been identified with the importation of pulp and is well known to buyers in the Paper Industry in this country.

Chemical Paper Mfg. Co. Buys U. S. Envelope Building

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., January 15, 1923. The Chemical Paper Manufacturing Company of this city has acquired from the United States Envelope Company land and buildings situated on South Main street. The manufacturing equipment of the envelope plant will be moved to other divisions of the United States Envelope Company, largely to the new factory building recently completed as an addition to the Springfield division. It is expected that the Holyoke plant will be vacated by April 1.

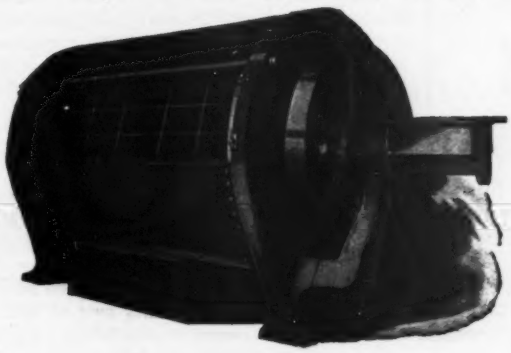
Business men in this city are somewhat depressed by the departure of the envelope plant. Of the 280 men employed at this city's division, only two are assured of positions with the company. The general manager of the local plant last week told the employees they had better begin looking for employment elsewhere. The building will be used by the Chemical Manufacturing Company and the Crocker-McElwain Company for general offices and storage. Considerable changes in the building will be made it is understood, and the offices of C. A. Crocker and R. F. McElwain will be in this building, it is now believed.

The building was erected in 1888 by the late James T. Abbe and George N. Tyner, and was operated by them as "Holyoke Envelope Company" until the plant was purchased by the United States Envelope Company in August, 1898.

"IMPCO" TAILING SCREENER

FOR SCREENING GROUND WOOD TAILINGS

Very Low Power and Upkeep Expense



Delivers Rejections Free from Good Stock

ANOTHER UNIT OF OUR CLOSED SYSTEM FOR PULP SCREENING

WRITE FOR FULL DETAILS *CORRESPONDENCE A PLEASURE*

IMPROVED PAPER MACHINERY CO. Nashua, N. H.

SHERBROOKE MACHINERY CO., LIMITED, SHERBROOKE, CANADA

R. J. DOWD · KNIFE · WORKS · EST'D · MACHINE KNIVES · 1847 · BELOIT · WIS

Better Paper— More Profit

Cluster filling is manufactured to fit any style bar filled roll.

Manufacturers of high-grade Beater Roll Bars, Beater Bed Plates and all styles of Machine Knives used in the manufacture of paper.

result when using the Dowd Patent Cluster Filling in your beater engine rolls.

With a brushing surface over 400 per cent greater than has the bar filled roll you can produce a stronger and better formed paper.

Dowd Cluster Filling is being used in some of the Most Noted Mills in the country and giving excellent results.

An installation will convince you of the advantages to be obtained in using this filling.

Further information and prices gladly given on request.

R. J. DOWD KNIFE WORKS

Beloit, Wis., U. S. A.

New York Trade Jottings

R. S. Kellogg, secretary of the News Print Service Bureau, sent to members Monday of this week the Bureau's Monthly Report.

* * *

W. G. MacNaughton, secretary of the Technical Association of the Paper Industry, will leave for Montreal Saturday of this week on business.

* * *

Wilkinson Bros. & Co. dealers in paper and paper stock of 419 Broome street, New York, have increased their capital from $80,000 to $1,000,000.

* * *

A. G. Becker & Co. are offering $3,000,000 of Hammermill Paper Company's seven per cent cumulative preferred stock at par and accrued dividends.

* * *

Stuyvesant Pulp and Paper Company has recently incorporated under the laws of New York State for $20,000. The incorporators are W. Braunstein, C. Reiss and L. Himmelfarb.

* * *

A joint meeting of the American Forestry Association and the New York State Forestry Association was held following a luncheon at the Hotel Commodore, New York, Wednesday noon.

* * *

E. Butterworth & Co., Inc., dealers in paper mill supplies, will move on January 26 from their present location at 1123 Broadway to 15 East 26th street, New York, between Madison and Fifth avenues.

* * *

B. C. Olsen, of W. G. Taylor & Co., London, England, dealers in pulp and paper mill supplies for the British Isles, arrived in New York on December 23 and has been visiting connections here for the past few weeks.

* * *

Under date of January 8, the Alling & Cory Company, of 313-21 West 37th street, New York, prominent paper dealers, sent to the trade a stock sheet covering machine finish, super and antique grades of Clarion book papers.

* * *

A brief meeting of the National Forestry Program Committee, of which R. S. Kellogg, secretary of the News Print Service Bureau, is chairman, succeeded the joint forestry meeting held at the Hotel Commodore on Wednesday.

* * *

A. De Angelis, Inc., packer of paper mill supplies, is temporarily located at 783 East 3rd street, Brooklyn, with the phone number, Berkshire 6589, due to the recent sale of the company's building at 28 Locust street, Brooklyn.

* * *

A petition in bankruptcy was filed on January 9 against the Harris Paper Company, Inc., of 31 East Tenth street, by the following creditors: Manhattan Stationery Company, $53; Lion Envelope Company, $450. Judge Knox has appointed Samuel Hershenstein receiver under $7,500 bond.

* * *

George H. Harvey, of the Gardner-Harvey Paper Company, of Middletown, Ohio, was in New York last Tuesday to confer with other members of the Joint Felt and Papermakers' Committee, in connection with the felt data sheet and other matters. Mr. Harvey is Chairman of the Joint Committee.

* * *

The buildings at Nos. 103-109 North Third street, Brooklyn, with more than 50,000 square feet, near the Eastern district terminal, have just been leased through G. P. Butterly by the newly incorporated McKenny, Williams Corporation, represented by the Chauncey R. E. Company, which manufactures corrugated paper materials. The lease is for a period of years at rentals aggregating about $175,000.

* * *

George La Monte & Son, manufacturers and distributors of safety papers, of 61 Broadway, New York, announce the election of Martin L. Haggerty to the position of general manager of the company. "This appointment is made," the company's announcement says, "in recognition of Mr. Haggerty's years of faithful service and of his demonstrated ability. We are confident that the announcement of this appointment will be as gratifying to Mr. Haggerty's friends in the trade as it is to us."

* * *

The following item appeared in the *Wall Street Journal* of January 9, 1923: "The forthcoming report of International Paper Company will probably be poor, in spite of record production and consumption of news print. The boom in the industry did not come until the second half. Mills were running on part time during the early part of 1922, owing to conditions caused by a strike some months before. But an improvement is almost certain during 1923 as print paper consumption shows no signs of falling off."

* * *

The Forest Policy Committee of the United States Chamber of Commerce will hold a meeting in New York on January 18. While members of the committee or officials of the national chamber refuse to discuss the matter, it is generally understood that the meeting has been called to try and harmonize the various views held by members of the committee. The whole matter of the Forest Policy Committee's report is to be threshed out at the meeting of the Board of Directors of the national chamber to be held in Washington in February.

* * *

E. R. Mosher Company, Inc., news print paper dealers of 51 East 42nd street, New York, filed schedules in bankruptcy on Thursday, January 11, listing liabilities of $148,431 and assets of $116,014, the main items of which are: Accounts, $51,367; notes, 33,386; cash, $17,777; unliquidated claims, $7,202. The principal creditors listed are G. B. Hewitt & Brothers, Inc., $16,439, partly secured; Bedford Pulp and Paper Company, $20,899; Dennison-Pratt Paper Company, $17,572; Northern Paper Mills, $17,130; Oswego Falls Corporation, $13,435; Scroon River Pulp and Paper Company, $18,211, and Flambeau Paper Company, $9,782.

* * *

Johaneson, Wales & Sparre, Inc., of 16 East 41st street, New York, have been appointed sole selling agents for the following Swedish mills: Billeruds Aktiebolag, Seffle, Sweden, manufacturers of Castle Brand mitscherlich sulphite, Stomne Extra Strong kraft and Church Brand prime bleached sulphite; Kramfors Aktiebolag, Stockholm, Sweden, manufacturers of Kramfors strong unbleached sulphites and Franco prime strong kraft pulp; Travaruaktiebolaget Svartvik, Sundsvall, Sweden, who manufacture Svartvik Three Crown and Two Crown easy bleaching sulphites as well as prime strong sulphite, particularly suitable for the manufacture of book paper; Konga Aktiebolag, Konga, Sweden, manufacturers of Prime Quality bleached sulphites.

Colonel Franklin Speaks at Richmond

RICHMOND, Va., January 17, 1923.—Colonel B. A. Franklin, vice-president of the Strathmore Paper Company, spoke at a dinner in his honor held last night at the Hotel Richmond by the Strathmore distributors, and will be the principal speaker at the luncheon and weekly meeting of the Richmond Advertising Club to be held at 12:55 o'clock today. The subject of Col. Franklin's talk today will be "The Why and Wherefore of Advertising."

the form of a Lubrication Audit which the Vacuum Oil Company offers to make for individual plants. See details below.

If you are convinced that the lubrication of your machinery warrants serious thought, please feel free to write at once for this Vacuum Oil Company service. To gain time we suggest that you address our nearest branch office.

The Lubrication Audit

Explained Step by Step in Condensed Outline

INSPECTION: A thoroughly experienced Vacuum Oil Company representative in co-operation with your plant engineer or superintendent makes a careful survey and record of your mechanical equipment and operating conditions.

RECOMMENDATIONS: We later specify, in a written report, the correct oil and correct application of the oil for the efficient and economical operation of each engine and machine. This report is based on:—

(1) The inspection of the machines in your plant.

(2) Your operating conditions.

(3) Our 57 years of lubricating experience with all types of mechanical equipment under all kinds of operating conditions throughout the world.

(4) Our outstanding experience in manufacturing oils for every lubricating need.

CHECKING: Following the installation of our oils, periodical calls will be made.

FOR THE ABOVE FREE SERVICE address our nearest branch office.

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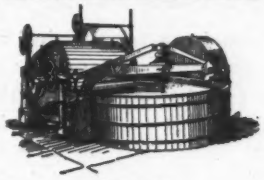
A grade for each type of service

A Lubrication Audit

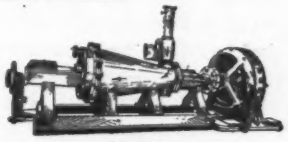
in the *Paper Industry*

would point out the Correct Lubrication for the important machines as follows:



Beaters

Beater bearings, generally unnecessarily hot, will run cooler if the stock leakage is eliminated and oiling is regularly attended to. The regular use of **Gargoyle D.T.E. Oil Extra Heavy** overcomes beater lubrication difficulties.



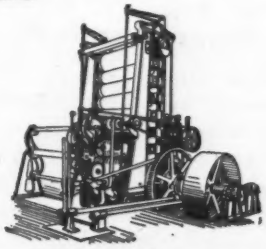
Jordans

Because of the high speeds and heavy pressures which are always present, and the side pull on bearings when belt driven, it is necessary to use a heavy bodied oil. For this purpose we recommend **Gargoyle D. T. E. Oil Extra Heavy.**

Paper Machines

For bearings of the paper machine, subjected to induced heat from steam used for drying, an extra heavy bodied oil is required such as **Gargoyle D. T. E. Oil Extra Heavy.**

The rolls at the wet end subjected to moisture and heavy pressure demand a compounded oil which will resist the washing tendency and maintain a perfect oil film. We recommend **Gargoyle Voco Engine Oil No. 1** for these specially trying conditions.



Calenders

Paper machine production is directly dependent upon uniform speed. Calender bearings are subjected to heavy pressures and high frictional heat. The regular application of **Gargoyle D. T. E. Oil Extra Heavy** insures uniform speed, and consequently minimizes "broke."

VACUUM OIL COMPANY

Editorial

Vol. LXXVI New York, January 18, 1923 No. 3
FIFTY-FIRST YEAR

Import Statistics Delayed

The PAPER TRADE JOURNAL has received a number of inquiries as to why the imports and exports of paper and pulp for October, which have been printed regularly each month for a long number of years past in this paper, are being delayed. The export figures for October were issued about the usual time, the Department of Commerce issuing therewith the following note: "Only the exports of domestic merchandise by articles and principal countries are published at this time, on account of delay in the import reports. The corresponding statement of imports will be published when the delayed reports are received.

"Owing to the great number of defective entries filed with collectors of customs since September 22, which failed to show the information required by the new tariff law and the revised statistical schedule, the compilation of imports under the new tariff from September 22 to October 31, 1922, is proceeding very slowly."

Owing to this delay the printing of the exports has been held up in the PAPER TRADE JOURNAL so that the export and import figures might be printed together in the usual convenient form. These import figures are expected almost immediately now.

In order to inform American exporters of the trend of exports from the United States at the earliest possible moment, the Paper Division of the Bureau of Foreign and Domestic Commerce will issue, beginning with January figures, a series of mimeographed monthly statements. These precede the regularly printed Monthly Summary of Foreign Commerce and are mailed out as soon as the figures can be compiled from the Custom House reports. Each item shows countries of destination. Statement No. 4,711 covers news print, book and surface coated paper; No. 4,721 covers greaseproof and waterproof, kraft and other wrapping paper; No. 4,733 paper board and strawboard and bristols and bristol board; No. 4,724 deals with writing paper, envelopes, papeteries and cover paper.

A Great Year in Forestry

It is a hopeful sign to observe the appreciable interest in forestry that has taken place of late. According to Warren B. Bullock, the secretary of the National Forestry Program Committee, of which R. S. Kellogg, secretary of the News Print Service Bureau, is chairman, the past year was undoubtedly the greatest year that forestry has yet known in this country. Forestry sentiment, Mr. Bullock says in a report just issued by him is growing materially. This is evidenced by the fact that 1922 opened with the devoting of an entire week to a study of this problem by the Agricultural Committee of the House of Representatives, on the Snell bill, sponsored by the National Forestry Committee, which included the American Newspaper Publishers Association, the American Paper and Pulp Association, the American Forestry Association, the National Lumber Manufacturers Association, the Association of Wood Using Industries, and several other local organizations of wide influence.

The hearings by Congress on the forestry question were the most extensive ever devoted to forestry by any organization, private or public, and the facts developed will result in eventual national action for the establishment of a national forestry policy

The Chamber of Commerce of the United States named a Forestry Committee, which traveled 10,000 miles visiting all of the country's lumber producing regions, as to the effort of the organized business interests of the country to learn the facts, upon which a future national forest policy could be predicated.

New advance steps were taken by the paper industry of the United States toward providing a future permanent supply of raw materials by the development of the national campaign for better forestry knowledge by the paper mills. The Woodlands Section of the American Paper and Pulp Association, tentatively formed in the fall of 1920 as an organization of the foresters and woods superintendents in the paper industry, became a permanent organization, and a recognized factor in the organized activities of the papermakers of the country.

The Bogulusa Paper Company, of Bogalusa, La., a subsidiary of the Great Southern Lumber Company, announced as 1922 neared its close that it was such a believer in forestry that it had turned over to the state authorities for technical forest management 53,000 acres, upon which timber will be grown under state law, to provide a permanent raw material supply for its paper mill. This is the biggest forestry step taken by any of the southern states members of the American Paper and Pulp Association.

In Canada, Price Bros. & Co., the great news print making organization, has turned over to the absolute control of its forestry department 900 miles of pulpwood forest. This area, north of Lake Superior, has been shown by extensive investigation to have become more productive of a forest crop under the handling of its timber through scientific management than would have been the case under ordinary logging methods. The Spanish River Pulp and Paper Mills have placed eight to ten townships, or over 300 square miles of pulpwood forest, under the control of its forestry department.

The Mead Pulp and Paper Company of Dayton, Ohio, controlled largely by the same interests which are back of the Spanish River Mills, has conducted extensive experiments in the artificial reforestation of the Ohio valley region with poplar and other hard woods, readily adaptable for pulp making.

The Chateaugay Pulp Company, of Chateaugay, N. Y., ordering 150,000 Norway spruce trees, gave the state of New York's conservation department the largest single order for trees for artificial reforestation placed during 1922.

Forest clubs have been organized in New York City and in Maine for the getting together monthly of technical foresters, actively practicing their profession. Those in Maine are largely engaged in work for paper companies.

At least three Maine paper companies are practicing actual reforestation, using chiefly spruce for pulpwood, but some pine. They are the Orono Pulp and Paper Company of Orono, Me., the Eastern Manufacturing Company of Bangor, Me., and the Pejebscot Paper Company of Brunswick, Me.

In New York three important paper companies at least are

practicing technical forestry, and artificially planting cut-over lands. These include the Chateaugay Pulp Company, Chateaugay, N. Y.; Finch, Pruyn & Co., Glens Falls, N. Y., and the St. Regis Paper Company, Watertown, N. Y. In addition, the forest lands of the Racquette River Paper Company of Potsdam, N. Y., looked ahead so many years that George W. Sisson, Jr., president of the company, formerly president of the American Paper and Pulp Association, sent his son to Cornell University to take a technical forestry course. This son is now head of the forestry department of the father's company.

In Northern Wisconsin a technical forester, Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, with two associates, one a technical forester, has in the last months of the year purchased 1,600 acres of land of which 1,100 acres will be artificially reforested, and the balance, 500 acres of land along four miles of frontage on three lakes, will be devoted to the establishment of the first forestry camp for boys in the United States. Camp Misike, as it will be known, will not be a new forest school, but a boys' private camp with a forestry training for its background. The purchase for next spring's planting of 12,000 pine and spruce trees marks the beginning of the first private reforestation to be done on an extensive scale in the middle west. Over a million trees will be planted in furtherance of this project.

The foregoing all goes to evidence the fact that the paper and pulp men of the country, both as individuals and through their associations, are decidedly alive to the vital importance to their industry of intelligent forestry work. It is encouraging to know that the campaign for greater interest in this matter has been brought to such a pass, and it is to be hoped that this interest will show even a greater expansion during the ensuing year.

Wm. McCorkindale Resigns From Parsons Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., January 15, 1923.—William McCorkindale has terminated his active service as superintendent of Parsons Paper Company. Mr. McCorkindale came to Holyoke from Crane & Co. of Dalton, Mass., in 1881, and for 42 years has devoted himself to the making of high-grade papers with the Parsons Company. The enviable reputation of the company is linked in all ways with his devotion to its interests.

Mr. McCorkindale is one of the last of a group of prominent paper makers who came to Holyoke in the early days. Among them were James Ramage, James W. Toole and William Reardon. During the past few months he has not been in robust health, but some weeks spent at Battle Creek last August greatly improved Mr. McCorkindale's condition. With Mrs. McCorkindale he has gone to Seabreeze, Fla., for the remainder of the winter. His son, Roger McCorkindale, who has been with the company for 20 years, succeeds him as superintendent.

National Paper Co. to Start at Moline

MOLINE, Ill., January 15, 1923.—Application was made last week by the National Paper Company of Moline, a newly organized wholesale paper concern, for incorporation under the laws of Illinois. Incorporators are C. E. Osburn, Frank McKinley, and C. J. McDowell. Officers of the firm are: President, C. E. Osburn; secretary, C. J. McDowell; treasurer, Frank McKinley.

The company will wholesale all kinds of paper for wrapping purposes, bond paper for printing, bags, etc. The firm has purchased a new Velie truck to be used in its delivery service.

Andrews Container Co. to Start in Greensboro

CHATTANOOGA, Tenn., January 15, 1923.—O. B. Andrews, of this city, president of the O. B. Andrews Company, and the O. B. Andrews Paper Mills Company, has just announced the organization of the Andrews Container Company to be located in Greensboro, N. C.

The new company, according to Mr. Andrews, has an authorized capital of $150,000, of which $125,000 has already been subscribed. The company will manufacture boxes, containers and several types of cartons.

The officers will be: President, O. B. Andrews; vice-president, Z. C. Patten, Jr., both of this city; and J. B. Pitkin, of Reidsville, S. C.; treasurer, W. Y. Preyer, of Greensboro, N. C., and secretary, R. P. Richardson, Jr., of Reidsville, N. C. These men, with two additions, W. E. Brock, of this city, and A. H. Eller, of Winston-Salem, will constitute the board of directors, Mr. Brock heading this board. Charles A. Hines, of Greensboro, will be general counsel for the new company.

Announcement was also made that the company has purchased the plant of the Irving Motor Company, of Greensboro, a two-story building 60x157 feet. Equipment for the manufacture of boxes will be installed at once and production by the Andrews Container Company will be started on January 25. The plant will be under the management of H. W. Chadwick, of this city, and Owen Bell, also of this city, will be superintendent. Mr. Chadwick was formerly assistant sales manager of the Chattanooga plant.

Mr. Andrews, commenting on the new venture, stated that it is a North Carolina corporation and has no direct connection with the local plant. Paper for the Greensboro development, however, will be supplied by the O. B. Andrews Paper Mills Company, of this city.

According to Mr. Andrews, the Greensboro plant has many advantages over other box companies, the product being disposed of within a distance of twenty miles from the point of production. All deliveries will be made by automobile truck. The finest of roads connect Greensboro with Winston-Salem, High Point and Greenville.

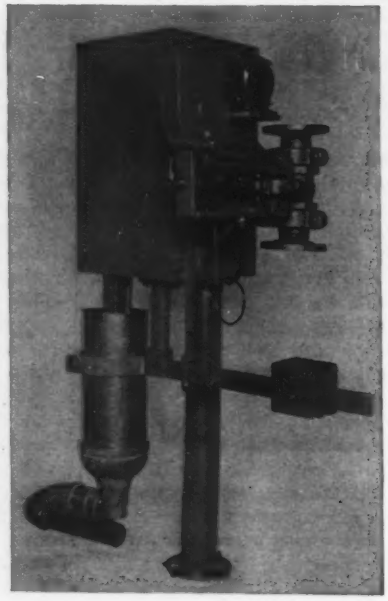
Mr. Andrews stated that the company is already in receipt of sufficient orders to guarantee capacity production for the first quarter of 1923. Mr. Andrews entered the paper box business in this city sixteen years ago, his progress being marked and the companies with which he is connected successful.

Quebec's Pulpwood Resources

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., January 17, 1923.—An estimate by the Chief Forester of Quebec puts the pulpwood resources of the province at 360,000,000 cords, according to a report received by the Paper Division of the Department of Commerce from the American Consul at Quebec. Of this amount, 180,000,000 cords are stated to be on licensed crown lands, 150,000,000 cords on unlicensed crown lands, and 30,000,000 cords on privately owned lands. An estimate made by the same authority in 1914 gave the total available supply as only 200,000,000 cords. The discrepancy between the two estimates is explained by the fact that in the original estimate a large quantity of saw logs were included, which are now placed in the category of pulpwood owing to the fact that the pulp and paper companies have gradually given up the lumber trade and concentrated on the manufacture of pulp and paper. A greater cordage has furthermore been obtained through the pulp companies now using trees with a top diameter of three inches as compared with six inches in 1914.

The area of old and new Quebec is given at 425,000,000 acres, of which it is estimated 60,000,000 acres are covered with forests of spruce, balsam, jackpine and poplar. By estimating six cords of pulpwood to the acre, the figure 360,000,000 cords is arrived at.



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THE TRIMBEY AUTOMATIC CONSISTENCY REGULATOR

(Patented)

More than 175 in use in the United States, Canada and Foreign Countries.

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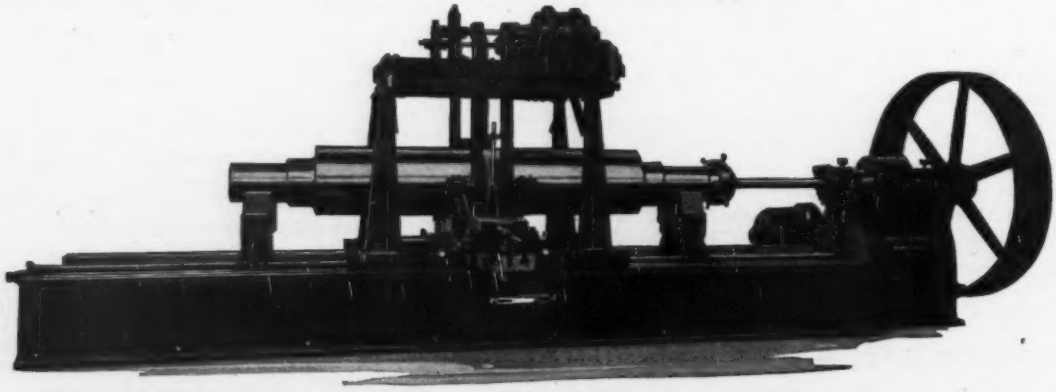
ROLL GRINDERS are the only machines of the kind fitted with automatic crowning device which develops a perfect crown without the use of a guide or former and repeated trying for the correct setting.



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LOBDELL CAR WHEEL CO. Est. 1836 **Wilmington, Del. U. S. A.**

Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

PAPER MAKING WIRES*

By V. Bouyer, Manager of the Wire Cloth Factory of Rai-Tillières, France.

(Continued From Last Week)

Weaving

(1) Testing and Spooling the Warp Wires. The wires are received in skeins from the drawing mill, and are tested to make sure that they are of even quality. They are then wound on spools, making as few knots as possible, for they could not be used directly in skeins as they would be too liable to become tangled and to break.

(2) Warping. This operation consists in placing side by side all the warp wires which are to go to make the cloth. For instance, if we wish to weave 300 meters of No. 70 plain weave cloth 3.50 meters wide, we required $\frac{3.50 \times 70}{.0275} = 9{,}907$ wires of a suitable length for weaving 300 meters; that is, taking into account the bending of the wires and the length of wire which must remain attached to the loom, we require about 350 meters of each wire. The method of warping is such as to ensure perfect homogeneity of the quality of the wires over the whole width of the cloth. The required width of cloth is obtained by filling successive grooves in the warp beam roll with a number of wires equal to, twice as great as, or three times as great as the number of the cloth according as a single, double or triple warp is used, the width of each groove being 1 inch. When ready to put on the warp, the wires are all fastened to the bottom of the grooves and the beam roll is then rotated and the wire unwound from the spools onto the beam until the required length of 350 meters has been thus transferred. The second groove is then filled in the same manner as the first one, and then the third, and so on until the full width of the warp has been prepared. Each groove, in the case under consideration, will contain 70 wires each 350 meters long. The wires which occupy any given positions in one of the grooves will occupy exactly the same positions in all the other grooves. If a spool does not contain sufficient wire to be able to supply all the grooves, the change in spools, which might cause a change in the wire, is spread over the width of the warp, so as not to affect its homogeneity. If, therefore, it is found that in practice the middle portion of a wire does not act the same as the edges, or if the two edges do not behave alike, this cannot be ascribed to irregularities in the quality of the warp across its width, as the wires in the center come from exactly the same skeins as the wires at either edge.

(3) Threading In. This operation consists in passing the ends of the warped wires through two parts of the loom, one of which will later, during the weaving operation proper, cross the warp wires in a manner depending on the kind of weave required, while the second one will crimp the shute wires in place: they are the "needles" and the "reed," respectively.

The needles, which have cotton, wire, or sheet metal eyelets, are attached to the middle of the frames, of which there are either two or four. The total number of needles on the two or four frames is equal to the total number of wires which have been warped. Each warp wire is taken in order and is threaded in the needles, which are also taken in regular order. The warp wires are thus divided into two or four "sheets" which can be lowered or raised independently when the frames are lowered or raised.

The wires are next threaded through the reed, which consists essentially of steel blades which are parallel to one another, and which are spaced apart to allow the wires to pass between them. There are as many of these blades per inch of cloth as there are meshes; so that for plain, repp, twill, the wires pass between the reed blades one by one, for double warp they pass two by two, and for triple-warp three by three. The order of threading in the needles also depends on the nature of the cloth: For plain, repp, double-warp, triple-warp, only two sheets will be formed; while for twill and zig-zag they will be divided into four sheets.

(4) Weaving Loom. Fig. 1. This consists essentially of:

(a) A warp beam (A) on to which the wires are warped to start with;

(b) A cloth beam (D) on which is wound the woven cloth;

(c) A rear levelling roll (B), which together with the

(d) Front levelling roll (C) maintains the warp wires always at the same level. The front roll also has a groove over which the woven cloth is bent slightly as it passes.

(e) A batten which may be either suspended from the upper framework of the loom or attached to the lower portion of the framework. The reed is placed in the lower portion of the batten, while in front of the reed and immediately below the warp is the race for the shuttle to travel upon from side to side.

(f) The heald shafts (E_1, E_2).

*(Lecture given to the students at the French School of Paper Making, Grenoble, France, during the year 1920-1921.) (Translated from *La Papeterie* xliii, September 10 and 25, and October 10, 1921, by A. Papineau-Couture.)

(g) A shuttle (G) which contains a bobbin of shute wire which unwinds as the shuttle travels across the cloth. When the bobbin is emptied, it is immediately replaced by a full one.

(h) Means for letting-off, or holding the warp tense and delivering it as weaving proceeds.

(i) Means for taking-up, or drawing away the cloth as manufactured.

(j) Suitable mechanical means for driving the batten and the healds, throwing the shuttle, and letting-off the warp, which must all be properly timed.

(5) After the Warp Has Been Threaded, the roll on which it is wound is placed in front of the loom and the free ends of the wires are made fast in a longitudinal groove in the warp beam. The reed and the healds are temporarily fixed on the loom, and the warp beam is turned until all the wires have been wound around it. The grooved roll is then removed, and the next step is

(6) Adjusting. The healds are put in their proper places and are attached to belts in such a manner that by raising one set of healds the other set is lowered, and vice versa. The batten, reed and shuttle race are put in their proper places, and the relative heights of these various parts are adjusted so as to obtain an even and regular weaving.

(7) Weaving. The weaving of each shute wire requires the following sequence of operations, which we shall describe for the case of the plain weave:

The batten is raised and drawn back, one set of heald shafts is raised and the other one is lowered, and the shuttle is thrown from left to right through the shed between the wires, unwinding the shute wire as it goes. The batten falls, and the reed (between the blades of which the warp wires can slide easily) pushes the shute wire against th already woven cloth, leaving just enough space between it and the preceding shute wire for the required size of mesh.

The batten rebounds, and lightly beats the same wire a second time. But in the interval between the two beats, or pushes, the position of the heald frames is reversed, the lower one being raised and the upper one lowered; so that the wire which was in the shed at the first beat is held by the crossed warp wires at the second beat. The batten is then raised and the warp beam is let-off an amount equal to the sum of the size of the mesh, the diameter of the shute wire, and the amount of bending of the warp wires around the shute wire. As the finished cloth is kept taut, as soon as the warp is let off a corresponding length of cloth is wound around the cloth beam.

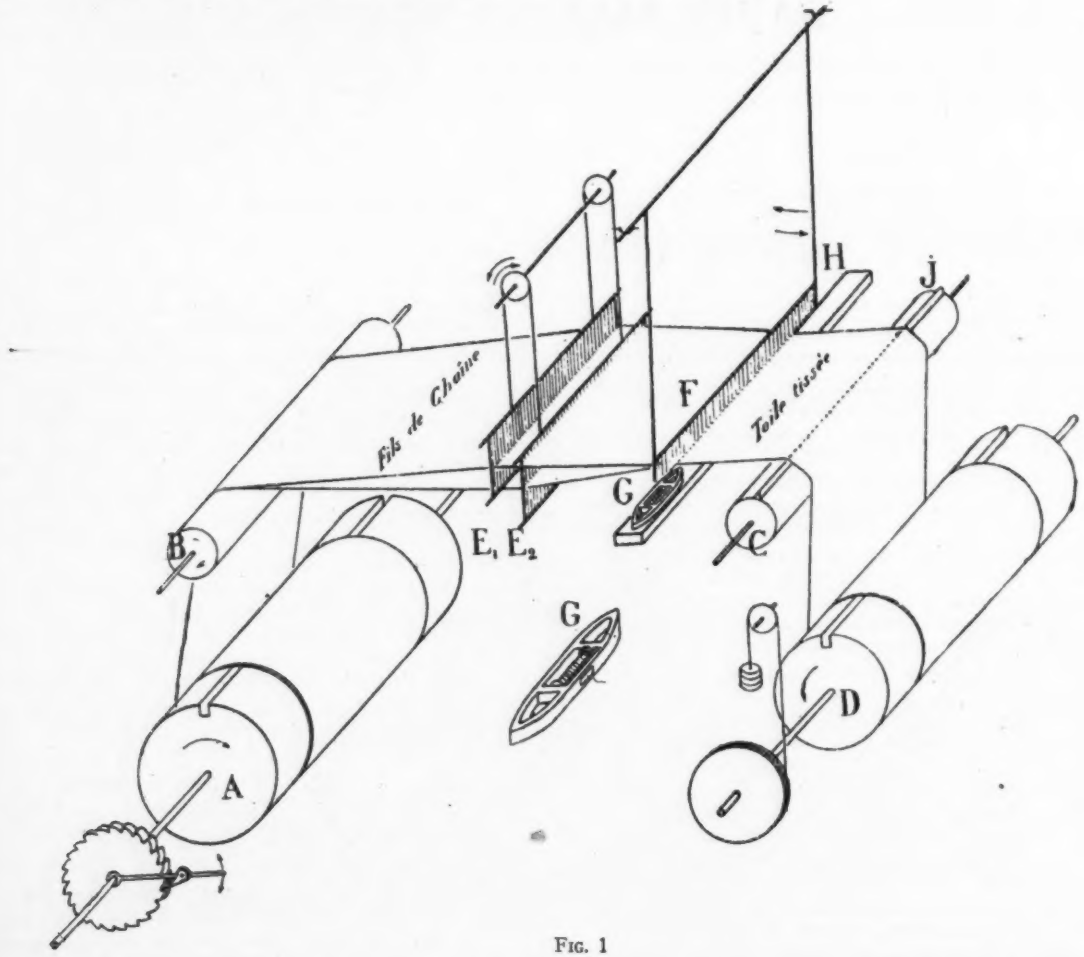

Fig. 1

The loom is then ready for weaving the next shute wire in the same manner as before, except that this time the shuttle will travel from right to left, and at the end of these operations the heald frames will again be in the position which they occupied before the weaving of the first shute wire.

These operations are repeated without interruption until the required length of cloth has been woven.

It should be noted that the heald frames are adjusted so that the two sets of warp wires are not under the same tension when the shute wire is struck by the reed and begins to bend the warp wires which will hold it in place. As the tension of the upper set of wires is less than that of the lower one, it follows that the upper wires will bend more than the lower ones. This is the reason why the two sides of the finished cloth are not the same. On the upper side the wires are bent more than on the under side. This increases the life of the wire, for its resistance to wear is naturally greater the greater the radius of the bend. This adjustment of the heald frames is also necessary in order that all the shute wires may lie in the same plane. If this were not done and the shute wires were irregularly placed, the warp wires would wear unevenly and would break prematurely at those places which had been subjected to the greatest amount of wear.

As a consequence of this unevenness in the thickness of the cloth it tends to roll up, and it is passed over the groove in the front levelling-roll to remove this tendency. After passing over this groove the cloth should lie perfectly flat.

The first quality required of a paper machine wire is that it should lie perfectly flat, both lengthwise and crosswise, and the weaving must be watched very closely to see that all parts of the loom are properly adjusted and remain so, so as to give this result.

The weaver measures the cloth as he weaves it, and when a sufficient length is finished (generally 12 to 20 meters) he cuts it off, unwinds it from the cloth beam and rolls it around a wooden roll.

(8) MEASURING. The cloth is laid out flat on a large table and is cut exactly to the required length, allowing for the amount which it will be stretched on the stretching machine.

(9) SEAMING. Seaming comprises two distinct operations:

(a) Sewing up each end of the cloth so as to prevent the last shute wire (or wires) from pulling out of the cloth.

(b) Bringing together the two ends thus prepared and sewing them around one shute wire of each end. This is known as "joining." If the seam is made by taking the last shute wire of each end of the cloth, it will behave as a hinge; but if the second last shute wire of each end is taken, then the seam cannot be articulated and is called a rigid seam.

With the hinge type of seam, the end shute wires must be attached very firmly to the warp wires to prevent their being pulled out. Hence, the end must be prepared with relatively heavy wire and the stitches should be close together, so as to reduce wear as much as possible. On the other hand, with a rigid seam the last shute wire need not be attached so firmly: Provided it is lightly held in place, the second last wire (which stands the tension of the seam) cannot pull out no matter how strong the tension in the wire. In this case the end of the cloth can be prepared with fine wire and by making long stitches. But as the joining wire spans four shute wires (two at each side of the seam) it will be longer and more subject to wear.

As the second type of seam is more open, and consequently allows the pulp to drain better on the machine, it is often preferred to the hinge seam. But with fine wires the only way of deciding which seam is better suited to the work in hand is to actually try them on the paper machine.

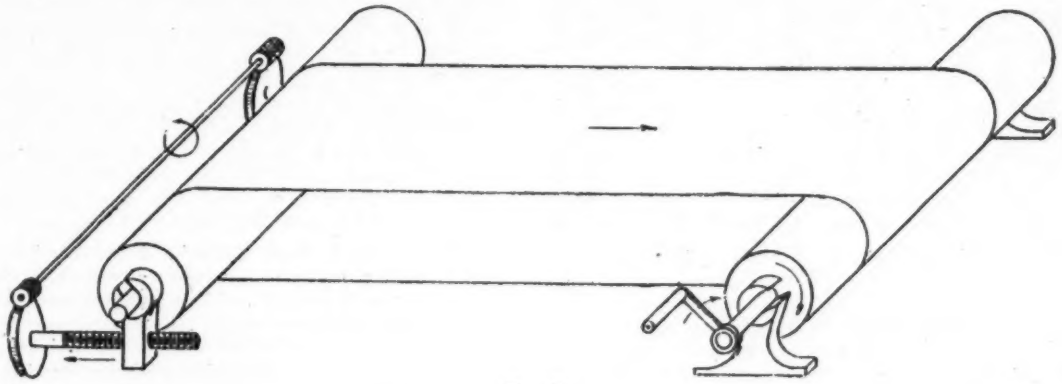

FIG. 2

The secret of making a strong seam, both in sewing each end separately and in joining the two ends together, lies in protecting the joining wires from wear as much as possible by placing them in the spaces between the warp wires. If possible they should not project above the thickness of the cloth.

The ends of the cloth may be either sewed by stitching through the meshes, or the warp wires may be all soldered to the last shute wire, or the warp wires are bent around the last shute and then spliced into the cloth (this latter method is used for heavy cloth having multiple strand warp). These end seams may be further strengthened by means of an additional stitching. The two ends may be laced together either with a single or with a double thread.

(10) SELVEDGE. When the warp wires are wound around the warp beam a few of the warp wires along the edges of the cloth must be replaced by textile threads, as the warp would otherwise have a tendency to jump out slightly after being struck by the reed and would form small ribs which would greatly affect the durability of the cloth. Also, finer threads are sometimes put to reinforce the edges, and these selvedges act as distinctive marks to distinguish the goods of different manufacturers.

(11) STRETCHING. After it has been seamed, the wire is stretched on the stretching machine. Fig. 2. This comprises two heavy rolls, corresponding to the breast roll and the lower couch roll of the paper machine. One of them is stationary, while the position of the other can be adjusted by means of a system of worm gears. The wire is placed on the rolls, put under the appropriate tension, and then run in the same manner as it will be run on the paper machine.

Next, the seam is flattened down between a generator of one of the rolls and a small hardwood or ivory roll, so as to make it absolutely level with the surface of the wire. If this were not done, the seam would interfere with the proper working of the wire, as the under side would wear out too quickly due to friction over the parts of the machine (rolls and suction boxes), while on the upper side the layer of pulp at the seam would not be of the same thickness as elsewhere.

The cloth is then ready to be packed.

Some people are under the impression that the wires are put through a press after they are woven. This is not the case. The shiny appearance of the under side of the cloth, which probably leads people to think this, is due to the action of the groove of the front levelling roll. The seam is flattened down, as we have seen, but the cloth is not subjected to the action of a press.

To the part of the wire which will be wound last in packing a tag is attached indicating the direction in which the wire was woven, as the wire should be made to run in the same direction on the machine. This is not absolutely necessary; but experience has taught that it is advisable, the reason probably being that the curve formed by the warp wires is not symmetrical.

(12) PACKING. The wire is then wound on three wooden poles, the first being placed inside the wire, the second one outside the wire and adjacent to the first, and the wire is wound around these two. The third pole is slipped into the loop formed by the end of the wire, and the whole is securely tied so as to prevent unwinding. Light boards are then nailed so as to hold everything fast, the wire is wrapped in paper and boxed. It goes without saying that it should be kept in as dry a place as possible.

(*To be continued*)

Now Dodge Mfg. Corp.

The Dodge Sales and Engineering Company, Mishawaka, Ind., which has for the past eight years been operating as the selling subsidiary of the Dodge Manufacturing Company and Dodge Steel Pulley Corporation, has now been consolidated with the parent company, Dodge Manufacturing Corporation, which was organized and began business last July.

The Dodge Manufacturing Corporation at that time took over the two long-established manufacturing concerns, Dodge Manufacturing Company organized in 1880 and Dodge Steel Pulley Corporation organized in 1917 as the successor of the Oneida Steel Pulley Company, which began the manufacture of steel pulleys in 1900.

Since July, 1922, the manufacture of Dodge, Oneida and Keystone power transmission appliances and Dodge Heavy Oil Engines has been conducted by Dodge Manufacturing Corporation.

The distribution of Dodge products, which has heretofore been done under the name of the Dodge Sales and Engineering Company, will hereafter be conducted by the Sales Department of the Dodge Manufacturing Corporation with Duncan J. Campbell, General Sales Manager, in charge and John A. Beynon, Assistant General Sales Manager.

The District Sales Organization of the Dodge Sales and Engineering Company will be continued as branches of the Sales Department of the Dodge Manufacturing Corporation. Their activities will be considerably increased and the service to dealer and consumer from branch warehouse stocks will be kept up to the high Dodge standard of efficiency.

The Advertising Department of the Dodge Manufacturing Corporation will be under the direction of William W. French, Advertising Manager, and the activities of this department will include a complete program of dealer co-operation. The entire resources of this department will be at the disposal of dealers for developing local campaigns on Dodge products and extensive plans are under way for direct-by-mail and other forms of dealer helps.

The Dodge Manufacturing Corporation is the largest manufacturer of power transmitting appliances in the world and is equipped to furnish stock products such as iron, steel and wood pulleys, pillow blocks, hangers, etc., as well as complete rope drives, fly-wheels and water wheel harness especially designed and constructed to meet the requirements of every industry.

Distribution of Dodge products is made through fourteen branch warehouses in power using centers, as well as hundreds of representative mill suppliers and jobbers.

The Dodge Manufacturing Corporation also controls the Dodge Manufacturing Company of Canada, Ltd., with head offices and works at Toronto, Ontario, and sales office at Montreal, Que.

More Argentine Casein Coming Forward

A larger quantity of Argentine casein is reported to be coming forward than was received during the fall months.

This will be good news for the coated paper manufacturer, and also for the magazine publishers who have been faced with the necessity of using starch products coated papers instead of the casein paper which has come to be in general demand.

The Argentine production of casein for a time was diverted to Europe, causing a serious shortage in the American market, particularly as the American manufacturers, despite a protective duty which they had previously not enjoyed, turned to production of powdered milk instead of casein.

The imposition of a duty upon Argentine casein resulted in an immediate drive by European consumers to secure the entire South American production or as much of it as possible, and large quantities which normally would have been shipped to the United States were turned to Europe, in the belief of the Argentine producers that the tariff would destroy their market in this country.

As time went on, however, it was found that American demands would be such as to warrant a continuous shipment of the Argentine product to this country, which is a market more favored by the South Americans than Europe, and large shipments will soon be under way. There will continue to be a shortage, probably, for some time to come, but the immediate pressure has been so far relieved that it is now possible to get casein at the high prices now prevailing. For a time it was impossible to get casein at almost any price, and all questions were purely nominal.

Meanwhile the work of the coated paper manufacturers for the securing of a lowering of the duty has proceeded. It seems certain that the United States Tariff Commission will grant a hearing. A letter has recently been received by Martin Cantine, chairman of the special committee of the Coated Paper Manufacturers, which has been working for this hearing, indicating the lines of evidence which the commission will expect when a hearing on the casein situation is held.

Dr. Baker, executive Secretary of the American Paper and Pulp Association, has in anticipation of such a hearing, notified other trade organizations which are working with the coated paper manufacturers of the situation, and suggested that they be prepared to appear either by briefs, or by personal appearance as witnesses when the Tariff Commission has its hearing.

Reclamation of Used Petroleum Lubricating Oils

A large amount of lubricating oil is now wasted because it is thrown away as unfit for further use. Yet such oils can be reclaimed and made as good as new or even better by simple apparatus already commercially available.

In an investigation which the Bureau of Standards has conducted with apparatus for reclaiming oil it was found that judging by all the commonly accepted standards the reclaimed oil is as good as new. Certain changes in the oil could be detected by special tests but it is a matter for future investigation whether these changes are detrimental or whether these tests are necessary.

The above-mentioned investigation is described in Technologic Paper No. 223 of the Bureau of Standards for sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents per copy.

S. D. Warren Co. Leads in Orders for Vol. III.

S. D. Warren Company leads the mills in the orders for Volume III, of the Manufacture of Pulp and Paper, dealing with the Manufacture of Pulp and Treatment of Wood Pulp.

Up to date it has placed orders for twenty-six copies of the work.

CHEMICAL PROPERTIES OF PULPS PREPARED BY INDIRECT COOKING*

By Mark W. Bray and T. M. Andrews

This study of sulphite pulp was undertaken in order to determine the nature of product obtained with different periods of cooking and to show, if possible, the factors influencing the character of the product at various stages of the reaction. Such an investigation is possible only by following the process at regular stages from the raw condition to the end of the cook. With this end in view a detailed chemical study was made of pulps at definite intervals of cooking, all conditions of temperature and pressure being maintained as closely as possible on a standard curve.

Methods of Analysis

Considerable difficulty has been experienced in finding a dependable method of analysis for pulps. A modified Cross and Bevan method[3] has proved most satisfactory for the determination of the cellulose content. The alpha-, beta-, and gamma-celluloses were determined by the method developed at the Forest Products Laboratory[4]. Certain pulps, especially the raw cooks, appear to be oxidized by the chlorine treatment and hence give a correspondingly high solubility in the Mercer's solution (17.5 per cent NaOH) used in the separation of the stable alpha-cellulose from the unstable beta- and gamma-celluloses. However, by careful manipulation this oxidation can be largely avoided in most instances. The moisture, hot-water-soluble, and lignin contents have been determined by the ordinary methods used at this laboratory.[5]

Experimental Mitscherlich Sulphite Cooks

The pulps used in the investigations were made in a 50-pound capacity digester at the Forest Products Laboratory, thereby permitting the cooking conditions to be observed in detail[6] The various factors of pressure, temperature curve, strength of cooking acid, both free and combined SO_2 are thus furnished. These conditions combined with a detailed chemical study furnish a basis for determining the relation of pulps of this series and show the way to a new and improved series of cooks.

As it is impossible to obtain representative samples of pulps during the process of cooking, cooks were blown at definite periods from the raw stage to a well-cooked product. All these cooks followed as nearly as possible the same curve, permitting the data from the separate cooks to be applied at any similar period during a single cook.

The spruce wood used in these cooks analyzed 58.4 per cent Cross and Bevan cellulose and 34.7 per cent alpha-, 5.7 per cent beta-, and 14.2 per cent gamma-cellulose, as shown in Table 1. As would be expected, the hot-water soluble and the 1 per cent sodium hydroxide soluble contents are considerable amounts, which taken with a lignin content of 28.3 per cent partly account for there being only 58.4 per cent cellulose as determined by the Cross and Bevan method. Yet even this yield is not equaled in commercial cooking. With the results of the different cooks it is possible, perhaps, to show some of the causes, or at least the stages, of the disintegration or changes that wood undergoes during continued treatment with hot sulphite cooking liquors.

Yield and Quality of Pulps

The shorter cooks of this series naturally were raw and afforded samples of pulp well without the range of mill conditions as far as real pulp is concerned. Those samples obtained between the seventh and ninth hours showed a gradual pulping action, but it was not until ten hours of cooking that a pulp was obtained that could be screened and made into sheets. All the cooking data, such as temperature, time of cooking, strength of acid, free and combined, yield, bleaching qualities, and machine-run and ball-mill tests are given in Tables 2 and 3. The eleven-hour cook had good strength and color and though not of as high quality as good commercial Mitscherlich pulp was the best product obtained in this series.

*Presented at the fall meeting of the Technical Association of the Pulp and Paper Industry at Detroit, Mich., October 9 and 10, 1922.

[1]Chemist in forest products, Forest Products Laboratory, Madison, Wis.

[2]Associate chemist in forest products, Forest Products Laboratory, Madison, Wis.

[3]A. W. Schorger, J. Ind. Eng. Chem., Vol. 9, p. 556 (1917).

[4]An Improved Method for the Determination of Alpha-, Beta-, and Gamma-Cellulose. Presented by the authors at the sixty-fourth meeting A. C. S. (September, 1922).

[5]S. A. Mahood and D. E. Cable, J. Ind. Eng. Chem., Vol. 14, No. 8, page 727 (August, 1922).

[6]Cooking data supplied by R. N. Miller and W. H. Swanson, Paper Trade Journal, April 13, 1922. Technical Association Paper Series V (1922), pp. 69-74.

TABLE 1—ANALYSIS OF EXPERIMENTAL MITSCHERLICH SULPHITE PULPS

				Basis of Wood							
Sample No	Cook No.	Cook duration Hrs.	Yield %	Hot Water Sol. %	1% NaOH Sol. %	1% NaOH Sol. Corrected for Water Sol. %	Lignin %	Cellulose %	Alpha-cellulose %	Beta-cellulose %	Gamma-cellulose %
Spruce wood				5.6	15.1	9.5	28.3	58.4	34.7	5.7	14.2
52	630-I	7	80.8	5.1	14.8	9.7	20.9	50.2	31.7	8.30	8.9
51	629-I	9	62.8	2.2	11.2	9.1	12.0	45.9	28.4	9.7	6.5
44	626-I	10	64.0	1.9	8.4	6.5	10.6	45.2	35.8	7.7	6.2
37	625-I	11	51.0	0.6	7.3	6.7	3.9	43.7	36.7	2.4	4.7
63	634-I	11½	50.6	0.4	5.7	5.3	4.6	44.2	38.5	0.9	4.4
62	633-I	12	51.2	0.5	5.6	5.1	3.8	45.1	37.3	2.9	5.5
53	631-I	12½	51.6	0.0	5.9	5.9	2.5	46.7	40.0	2.6	5.2
61	632-I	13¼	47.1	0.8	5.3	4.5	3.0	42.7	37.5	2.3	4.3
69	636-I	15	48.4	0.2	5.3	5.10	0.9	43.1	36.9	1.5	5.0

				Basis of Pulp					Basis of Cellulose		
Sample No.	Cook No.	Time of cooking Hrs.	Moisture %	Hot Water Sol. %	1% NaOH Sol. %	1% NaOH Sol. Corrected for Water Sol. %	Lignin %	Cellulose %	Alpha-cellulose %	Beta-cellulose %	Gamma-cellulose %
52	630-I	7	2.4	6.3	18.3	11.9	25.9	62.0	63.2	16.5	17.9
51	629-I	9	3.3	3.5	17.9	14.4	19.1	73.1	61.8	21.1	14.3
44	626-I	10	5.1	2.9	13.1	10.2	16.6	76.9	71.9	15.6	12.5
37	625-I	11	4.1	1.2	14.3	13.1	7.6	85.8	83.9	5.5	10.8
63	634-I	11½	5.1	0.9	11.2	10.4	9.1	87.4	87.2	1.9	10.0
62	633-I	12	4.8	1.0	10.9	9.9	7.4	87.9	82.6	6.4	12.2
53	631-I	12½	4.7	0.0	11.8	11.8	5.1	92.7	83.6	5.4	10.9
61	632-I	13¼	4.9	1.7	11.1	9.4	6.3	89.9	87.7	5.4	10.1
69	636-I	15	5.1	0.7	12.7	12.0	1.8	94.4	86.8	2.8	11.0

TABLE 2—COOKING DATA FOR EXPERIMENTAL PULPS

Cook No.	Chips oven dry Lbs.	H_2O in chips Gal.	Acid Gal.	Cooking liquor per 100 lb. O. D. wood Gal.	Maximum temperature °C.	Time to maximum temperature Hrs.	Cook duration Hrs.	Total SO_2 %	Free SO_2 %	Comb SO_2 %	Yield of unscreened pulp %	Yield of screenings %	Yield of screened pulp %	Bleach 35% available chlorine %
630-I	101.6	3.40	59.5	61.9	133	7	7	3.78	2.37	1.41	80.8	Not screened	80.8	Not bleached
629-I	97.5	3.30	57.0	62.2	145	8½	9	3.82	2.42	1.40	62.8	Not screened	62.8	Not bleached
626-I	90.6	3.08	55.0	64.9	145	8½	10	3.74	2.36	1.38	64.0	0.70	63.3	Over 30
625-I	92.3	3.18	57.0	65.1	145	8½	11	3.81	2.40	1.41	51.0	0.70	50.3	Over 30
634-I	98.9	3.33	57.0	61.0	145	8½	11½	3.80	2.38	1.42	50.58	1.08	49.5	Over 30
633-I	99.0	3.36	57.5	61.5	145	8½	12	3.79	2.39	1.40	51.20	0.00	51.2	Over 30
631-I	102.0	3.48	56.5	58.8	145	8½	12½	3.82	2.42	1.40	51.60	1.20	50.4	Over 30
632-I	95.9	3.24	58.25	64.1	145	8½	13¼	3.82	2.41	1.41	47.05	0.75	46.3	Over 30
636-I	88.3	3.28	58.5	70.0	137	15	15	5.60	4.46	1.14	48.43	0.13	48.3	15

Cooking with Increased Strength of Acid at Decreased Temperature

In order to secure for chemical study an experimental pulp which had physical properties more nearly identical with those of commercial Mitscherlich pulp a cook was made under conditions somewhat modified from those used in the series. The free SO_2 was increased to 4.46 per cent and the cooking time to 15 hours, while the maximum temperature was reduced to 137° C. Under these conditions the yield of pulp was 48.4 per cent, based on the dry weight of the wood. This pulp compared favorably with the eleven-hour cook of the series in physical properties, was more readily bleached, and closely resembled good Mitscherlich pulp.

Discussion of Analytical Data

In Table 1 are given the chemical data for this series of cooks. The curves for yield, cellulose, alpha-, beta-, and gamma-celluloses, lignin and 1 per cent sodium hydroxide soluble are shown in Figure 1. It appears that during the early part of the cook there is a removal or destruction of nearly equal parts by weight of cellulose and lignin. With seven hours of treatment these losses are 8.2 and 7.4 per cent (based on weight of wood), respectively, as shown in Table 4. During the remainder of the cooking period the lignin loss becomes larger than that of cellulose and the above ratio is not maintained. However, the ratio of lignin lost to cellulose lost ranges from 1.60 to 2.17, or an average of 1.77. This value holds over a range of time from eleven to fifteen hours; and the variation from the mean is 0.11, with the exception of the one instance where it varies 0.4. These results are substantiated by three other series of cooks by the alkaline process, a full discussion of which will be given in a subsequent publication. This would indicate that by none of the present commercial methods of cooking is it possible to obtain a higher yield than approximately 45 per cent of cellulose as pulp, although the wood contains approximately 60 per cent cellulose.

Since the cooking conditions in this series are constant, time being the only variable, it is to be expected that the quality of the

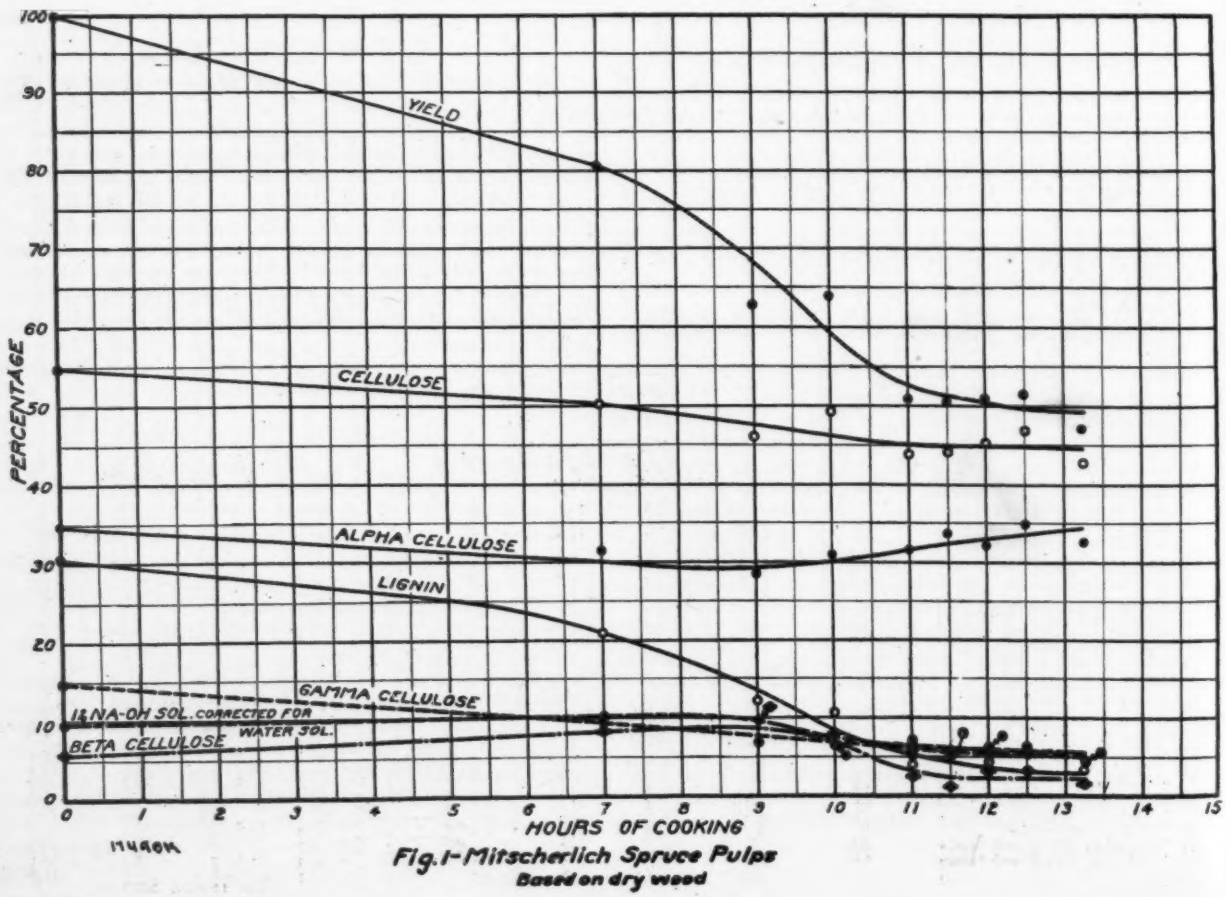

Fig. 1—Mitscherlich Spruce Pulps
Based on dry wood

TABLE 3—PHYSICAL TESTS OF EXPERIMENTAL PULPS

Cook No.	Machine Run: Weight per ream Lbs.	Mullen test Lbs. sq. in.	Strength factor points Lbs. per ream	Breaking length Meters	Stretch %	Double folds No.	Temperature of testing room F.	Humidity of testing room %	Ball Mill: Maximum strength Lbs. sq. in.	Time to max. strength Min.	Tearing force Lbs.	Time to max. tear Min.	Double folds No.	Time to maximum folds Min.
630-I	Pulp raw—not tested													
629-I	Pulp raw—not tested													
626-I	56.6	32.2	0.57	5,960	1.7	58	65	64.5	119	80	1.5	40	670	60
625-I	51.9	46.8	0.90	6,410	2.1	389	69	65.0	109	60	2.3	40	1,030	40
634-I	51.0	36.1	0.72	6,030	2.7	271	66	65.5	99	60	1.8	20	730	40
633-I	47.0	35.9	0.76	5,450	2.1	426	71	65.0	109	60	2.2	40	700	60
631-I	46.0	28.5	0.62	5,830	1.8	223	81	65.0	98	60	1.9	40	910	80
632-I	48.1	34.9	0.72	6,080	2.1	363	68	65.0	85	60	2.5	80	1,500	40
636-I	53.8	40.0	0.74	6,120	2.5	283	70	65.0	95	60	1.8	20	1,220	40

pulp will steadily approach a maximum, while the lignin content will gradually tend toward a minimum. In the seven-hour cook, which was very raw, the yield is very high and only a small part of the lignin has been removed. Compared with the cellulose based on bone-dry wood there is a loss of 8.2 per cent cellulose in this period of cooking. An additional two hours of cooking removes 8.9 per cent lignin with an additional loss of 4.8 per cent in cellulose material. The next two hours appear to cause the greatest change in the nature of the pulp both physically and chemically.

Until the ninth hour of cooking the cellulose percentage in the pulp has increased but slightly. From the eighth of the eleventh hour this value in the pulp increases 25.7 per cent to 85.8 per cent with a lignin content of 7.6 per cent. However, the yield of cellulose material is 25.2 per cent less than the theoretical, due to the solubility and decomposition of this material under the drastic cooking conditions. An hour and a half of additional treatment improves the cellulose content of the pulp by 6.9 per cent with an increase in yield of cellulose of 3 per cent based on the wood. The latter is unexplainable at present. Under ordinary conditions an increase in the cooking time causes an increase in the cellulose content of the pulp produced. Based on wood, however, the actual yield of cellulose is usually less the longer the period of cooking.

TABLE 4—MITSCHERLICH LIGNIN AND CELLULOSE LOSSES IN EXPERIMENTAL COOKS

Cook No.	Cook duration Hrs.	Cellulose %	Lignin %	Cellulose lost %	Lignin lost %	Ratio Lignin lost / Cellu. lost
Wood	0	58.4	28.3	...	...	....
630-I	7	50.2	20.9	8.2	7.4	0.90
629-I	9	45.9	12.0	12.5	16.3	1.30
634-I	11½	44.2	4.6	14.2	23.7	1.67
625-I	11	43.7	3.9	14.7	24.4	1.66
623-I	11¾	47.3	4.0	11.1	24.3	2.19
633-I	12	45.1	3.8	13.3	24.5	1.84
632-I	13¼	42.7	3.0	15.7	25.3	1.61
636-I	15	43.1	4.1	15.3	24.2	1.70

The lignin in this series of cooks has shown a gradual decrease up to 12½ hours of cooking. Since the best pulp was produced at the eleventh hour it is evident that factors other than lignin removal affect the character of pulp. After twelve and one-half hours there appears to be a redeposition of lignin on the fiber instead of a continued removal. While the lignin percentage has increased slightly the cellulose content has diminished and the pulp is of a poor quality.

That portion of the wood which is soluble in one per cent alkali persists almost quantitatively in the pulp through the ninth hour of cooking. Between the ninth and eleventh hour this material is removed rapidly to about 0.6 of its original quantity. From the eleventh hour only a very slight further decrease is noted.

In the early cooks the alpha-cellulose content is quite low. With longer periods of cooking, however, the alpha-cellulose as found in the pulp and calculated on the basis of wood shows an increase. At the same time the beta-cellulose shows a gradual decrease to an almost negligible quantity while the gamma-cellulose is very nearly constant. The products from the short cooks are very hard to purify and the chlorine treatment probably causes a deterioration of the resistant cellulose with a corresponding increase in the non-resistant portion.[7] Those cooks containing a small amount of lignin, and consequently easily purified by the chlorine-sulphite method, give an alpha-cellulose content that is fairly constant, varying between 82.5 and 87.7 per cent. This value closely approximates the alpha-cellulose content of cotton linters, which in one case was 88.3 per cent for pulp linters.[8] Cooks longer than eleven hours in the series appear to be of an inferior quality both chemically and in appearance. As a general conclusion, it seems that with the conditions used in this series, eleven hours is the maximum time for the production of a pulp approaching commercial quality.

Commercial Pulps

A number of commercial pulps were obtained from different companies and used as a standard of comparison for the laboratory cooks. The analytical data for these pulps is given in Table 5. These samples consist of both bleached and unbleached pulps and are of high purity and good physical properties. The lignin content varies from 1.3 per cent to 7.8 per cent in the unbleached and from 0.5 per cent to 0.9 per cent in the bleached pulps. In none does the cellulose content fall below 90 per cent and the purest bleached pulp runs 98.4 per cent cellulose. In the bleached samples the cellulose content is very high, 97.1 to 98.4 per cent, and the lignin value plus the cellulose totals 97.6 per cent to 99.3 per cent. The cellulose value for unbleached pulp is considerably less in most cases, ranging from 90.8 per cent to 94.8 per cent. Yet certain unbleached pulps are of a remarkable purity being as high as 96 per cent cellulose and containing 1.3 to 1.6 per cent lignin or a total of 96.6 to 97.7 per cent for lignin and cellulose. The sodium hydroxide-soluble content is fairly constant between the values 9.2 to 12.4 per cent and in some cases slightly higher values were obtained. Alpha-cellulose is very constant in value for all these pulps, averaging around 83 per cent. Beta-cellulose is within the range of 1.4 to 4.1 per cent and gamma-cellulose varies very

[7] "Factors Influencing the Properties of Wood Cellulose as Isolated by the Chlorination Method," by Mark W. Bray and T. M. Andrews.

[8] "Comparison of Wood Cellulose and Cotton Cellulose," J. Ind. and Eng. Chem., Vol. 14, No. 8, p. 727 (August, 1922).

TABLE 5—COMMERCIAL MITSCHERLICH PULPS

Record No.	Description of wood used	Moisture %	Hot H_2O soluble %	1% NaOH soluble %	1% HaOH sol. corrected for water sol. %	Lignin %	Cellulose %	Alpha-cellulose %	Beta-cellulose %	Gamma-celluiose %
P176	Unbleached spruce and balsam....	4.9	0.9	10.5	9.6	1.6	96.1	82.1	3.2	13.8
P188	.....	3.5	1.6	12.5	10.9	5.2	95.3	82.8	5.1	14.1
P206	Unbleached spruce and balsam....	4.5	0.6	12.4	11.8	1.3	95.3	86.1	2.1	12.7
P187	Unbleached spruce	4.3	1.2	11.4	10.2	7.6	94.6	82.2	3.4	13.9
P185	Unbleached spruce	4.4	0.6	9.8	9.2	6.2	94.8	82.8	3.2	13.8
P186	Unbleached spruce	3.3	1.7	12.7	11.0	7.8	90.8	83.7	1.4	13.7
P213	Unbleached hemlock	4.3	0.5	14.2	13.7	1.4	92.4	83.8	3.3	13.9
P207	Bleached spruce and balsam.....	3.9	0.5	13.9	13.4	0.9	98.4	84.5	4.1	11.6
P175	Bleached spruce and balsam.....	4.6	0.0	11.6	11.6	0.5	97.1	81.4	3.6	13.3

little, being between 11.6 and 14 per cent. This gives a series of samples with varying chemical analyses, yet all having the properties of good pulp and affording a variety of standards each of which meets some requirement of the paper industry.

Comparison of Experimental and Commercial Pulps

Since the eleven hour cook is the best of the experimental series in its physical and chemical properties, it is interesting to compare it with commercial unbleached pulps made under similar conditions. This pulp has a cellulose content of 85.8 per cent and a lignin content of 7.6 per cent. It is interesting to note that commercial unbleached Mitscherlich pulp overages from 91 per cent to 96 per cent cellulose and the lignin varies between 1.3 and 7.8 per cent.

The alpha-cellulose content in the series is practically identical with that of the commercial pulps. The same is true of the one per cent sodium hydroxide soluble and the beta- and gamma-celluloses. The cellulose content of the commercial pulps, however, is considerably higher even though the stable and unstable celluloses are approximately the same as those of the Laboratory pulps.

It would appear, therefore, that certain impurities, though present in small quantities, have great influence in determining the physical quality of pulp. With any given pulp, even though it is within definite chemical limits, length of fiber, hydration, and all other such factors must be taken into account. Rather than any one factor determining the quality of a pulp, it is evident that the ultimate product is the result of a combination of conditions.

The single pulp, 636-I, cooked for fifteen hours with a greater concentration of free SO_2 and lower maximum temperature, is even better than the eleven-hour cook of the series. This pulp differs but slightly from commercial unbleached Mitscherlich spruce pulp, having a cellulose content of 94.4 per cent as compared with 94.6 per cent to 95.3 per cent for the latter and 86.8 per cent alpha-cellulose as against 82.2 to 86.6 per cent. The lignin content of the experimental pulp is 1.8 per cent, a value corresponding closely to that found in commercial pulps. Fifteen per cent bleach was consumed, indicating a product closely resembling good quality commercial pulp.

Summary

1. With all conditions constant except time, a series of spruce sulphite pulps was prepared by indirect cooking. These pulps were compared with commercial pulps made under similar conditions.
2. It has been found possible to compare such pulps by taking into consideration the cellulose content. A high cellulose content appears to be necessary to produce a good pulp.
3. The percentages of stable and unstable celluloses are an indication of the quality of the pulp, the pulp with the greater amount of stable cellulose usually being of a superior quality.
4. The pulp deteriorates with the overcooking necessary to remove all the lignin.
5. Until the ninth hour of cooking the cellulose and lignin contents of the pulp are very nearly the same as those of the wood.
6. The first few hours of cooking does not affect the alkali-soluble material. In the latter part of the cook a larger amount of this material is removed.
7. While the character of the cellulose and the lignin content are indicative of the quality of pulp produced, other factors not well understood appear to exert considerable influence.
8. Cellulose is always lost during the removal of lignin, and it seems 45 per cent is about the maximum yield of cellulose by present commercial methods of sulphite cooking.

F. C. Revolt Goes With Monroe Paper Products Co.

MONROE, Mich., January 17, 1923.—F. C. Revolt has become superintendent of the Monroe Paper Products Company, succeeding Louis Munier, who is now superintendent of the Keickhefer Container Corporation, which is just about to start its new board and container plant at Delair, N. J.

TECHNICAL SECTION, PAGE 34

Uehling Instrument Co. Issues Useful Folder

The Uehling Instrument Company, Paterson, N. J., has just issued a 12 page folder which explains concisely the two biggest losses in the steam power plant, namely (1) the loss in steam turbine economy due to air leakage into the condensing system and (2) the sensible heat in the flue gases lost up the chimney.

A table gives data on steam turbine economy as related to the absolute back pressure. The Uehling Combined Barometer and Vacuum Recorder, as illustrated in the folder, is in effect an automatic log of condenser performance because it records the existing vacuum as well as the absolute back pressure for every second of the day. The chart is legible to less than 1/20 inch of mercury between the range of 0 to 6 pounds back pressure thus detecting air leakage into the condenser, exhaust piping or turbine casing and showing whether or not the condenser is large enough to handle the load under any given conditions.

Data on combustion are given in another table, such as the variation of the chimney loss with the percentage of CO_2 and its relation to flame temperature and ratio of air to fuel supply.

The Uehling CO_2 Recorder and Indicator are illustrated and twelve different kinds of important information which these instruments furnish are cited.

A list of prominent users of Uehling equipment and a list of Uehling bulletins are also appended in the folder.

K. L. Warren to Operate Wolf River Pulp & Paper Co.

RIVIERE DU LOUP, Que., January 17, 1923.—The Wolf River Pulp and Paper Company has leased its entire plant and equipment at Riviere du Loup, Quebec, to Kenneth L. Warren of that city, a well-known consulting engineer specializing in pulp and paper-mill work, who will operate it to its full capacity as a groundwood pulp mill, for the present, until arrangements can be completed for its full development, including the addition of a complete paper making plant.

Mr. Warren has just returned from the Maritime Provinces, where he has similar interests, and has been occupied for the past few weeks initiating active construction work on a large hydro-electric development of which he has charge, which will furnish electrical energy for a motor-driven groundwood plant to be located on rail and tidewater in Windsor, Nova Scotia.

Alaska Pulp Co. Operating to Capacity

The Alaska Pulp and Paper Company, Speel River, Alaska, according to reports just received in New York, is running to capacity with sufficient orders on hand at present to insure its operation until next November. As business improves it is the intention to expand the capacity of the plant which at present is equipped with two four-packet grinders and lino inch machines with a capacity of 32,000 pounds of ground wood per 24 hours.

The plant started about two years ago, but after operating for several months was closed down, because of unsatisfactory business conditions, until recently.

Cellulose Bibliographies

Dr. C. J. West, chairman of the Committee on Bibliographies of the Technical Association of the Pulp and Paper Industry, has kindly offered to act for the Cellulose Division of the American Chemical Society as a receiving center for bibliographies relating to any branch of cellulose chemistry. It is hoped that all of those having such bibliographies will send a copy to Dr. West, National Research Council, 1701 Massachusetts avenue, N. W., Washington, D. C. Dr. West has kindly offered to assemble all material received and make it available to anyone interested. It is hoped that a large amount of duplication of effort can be avoided in this way.

INDEX OF TECHNICAL SECTION, VOLUME 75, PAPER TRADE JOURNAL

PREPARED BY CLARENCE J. WEST

Beginning with volume 75 of the PAPER TRADE JOURNAL, the pages of the Technical Section are numbered consecutively. The pages in the following index refer, therefore, to the paging of the Technical Section and have no relation to the paging of the individual numbers of the JOURNAL. In this index, also, reference is made to the Abstract Section. Entries referring to abstracts of original articles are designated by *A*, while those referring to patents are designated by *P*. Pages without *A* or *P* refer to original articles published in the Technical Section. Author entries are given in Capitals.

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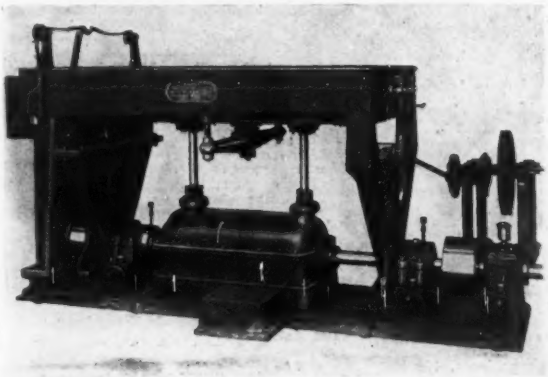

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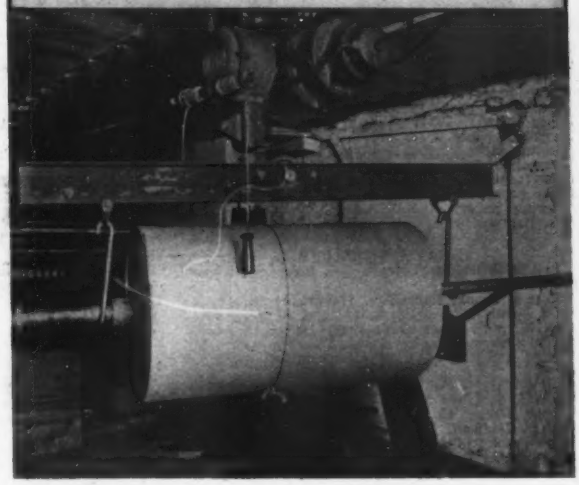

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SHEPARD ELECTRIC CRANES & HOISTS

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JANUARY 13, 1923

SUMMARY

News print.....2,827 rolls, 117 bls.
Printing paper.....404 cs.
Cigarette paper.....262 cs.
Wall paper.....17 cs., 1,778 pkgs., 3 bls.
Tissue paper.....16 cs.
Wood pulp paper.....85 bls.
Paper Board.....230 rolls.
Pergamyn paper.....100 bls.
Packing paper.....1,093 bdls.
Wrapping paper.....1,083 bls., 6 cs., 111 bdls.
Photo paper.....17 cs.
Filter paper.....55 bls., 3 cs.
Drawing paper.....70 cs.
Miscellaneous paper.....212 cs., 9,125 rolls, 2,014 bls., 113 bdls.

CIGARETTE PAPER

British American Tobacco Co., Megantic, Liverpool, 21 cs.
Rose & Frank, Roussillon, Havre., 24 cs.
De Manduit Paper Corp., by same, 90 cs.
De Manduit Paper Corp., Paris, Havre, 86 cs.
The Surhrug Co., by same, 25 cs.
Hard & Ritter, M. Calvo, Barcelona, 16 cs.

WALL PAPER

W. H. S. Lloyd & Co., Lapland, Antwerp, 1 cs.
F. G. Prager Co, by same, 1,778 pkgs.
A. C. Dodman, Jr., Inc., by same, 1 cs.
A. Murphy & Co., Megantic, Liverpool, 1 bl.
A. Murphy & Co., Mongolia, Hamburg, 5 cs.
A. C. Dodman, Jr., Inc., Homeric, Southampton, 8 cs.
A. Murphy & Co., Mt. Clinton, Hamburg, 2 bls.
W. H. Kinnear, M. Maru, Kobe, 2 cs.

TISSUE PAPER

Meadows, Wye & Co., Megantic, Liverpool, 9 cs.
Iwai & Co., M. Maru, Kobe, 5 cs.
Lightfoot Specialty Co., by same, 2 cs.

WOOD PULP PAPER

Birn & Wachenheim, America, Bremen, 85 bls.

PAPER BOARD

Lagerloef Trading Co., America, Bremen, 230 rolls.

PERGAMYN PAPER

Lundt Chocolate Co., America, Bremen, 100 bls.

PACKING PAPER

Blauvelt, Wiley Paper Mfg. Co., Volendam, Rotterdam, 22 bdls.
J. P. Heffernan Paper Co., by same, 628 bdls.
Bank of America, by same, 343 bdls.

WRAPPING PAPER

Atlantic & Pacific Tea Co., Drottingholm, Gothenburg, 394 bls.
M. Winter, Inc., Skiensfjord, Troudhjeon, 49 bls.
Wilkinson Bros. & Co., Inc., by same, 147 bls.
C. Steiner, Pr. Fillmore, Bremen, 6 cs.
Blauvelt, Wiley Paper Mfg. Co., Vitellia, Glasgow, 111 bdls.
W. Schall & Co., Mt. Clinton, Hamburg, 131 bls.
Hudson Trading Co., by same, 372 bls.

PRINTING PAPER

B. F. Drakenfeld & Co., Megantic, Liverpool, 8 cs.
P. Puttman, Lapland, Antwerp, 2 cs.
E. Dietzgen & Co., Mongolia, Hamburg, 45 cs.
C. Steiner, Pr. Fillmore, Bremen, 96 cs.
Bankers Trust Co., Western Plains, Hamburg, 253 cs.

NEWS PRINT

Chemical Nat'l Bank, by same, 1,752 rolls.
Parsons & Whittemore, Mt. Clinton, Hamburg, 253 rolls.
Parsons & Whittemore, by same, 117 bls.
M. Gottesman & Co., Inc., Drottningholm, Gothenburg, 605 rolls.
L. Gilman & Co., by same, 218 rolls.

PHOTO PAPER

Genaert Co. of America, Lapland, Antwerp, 17 cs.

FILTER PAPER

J. Manheimer, Homeric, Bordeaux, 55 bls.
Judson Freight Forwarding Co., White Plains, Hamburg, 3 cs.

DRAWING PAPER

Keuffel & Esser, Mt. Clinton, Hamburg, 70 cs.

PAPER

Hensel Bruckman & Lorbacher, Mt. Clinton, Hamburg, 15 cs.
J. W. Hampton, Jr., & Co., by same, 5 cs.
Republic Bag & Paper Co., Western Plains, Hamburg, 280 rolls.
D. S. Dalton & Co., by same, 2,121 rolls.
Chemical Nat'l Bank, by same, 1,704 rolls.
Arkell Safety Bag Co., by same, 60 rolls.
Harris & Co., by same, 172 rolls.
W. V. Bowater & Sons, Columbia, Glasgow, 227 rolls.
W. F. Etherington & Sons, by same, 49 cs.
W. F. Etherington & Sons, by same, 2 bls.
W. F. Etherington & Sons, Vitellia, Glasgow, 46 cs.
J. P. Heffernan Paper Co., Drottningholm, Gothenburg, 147 bls.
A. E. MacAdam & Co., by same, 480 rolls.
C. K. MacAlpine & Co., by same, 302 rolls.
C. K. MacAlpine & Co., by same, 113 bdls.
Seaman Paper Co., by same, 13 cs.
Int'l Acceptance Bang, Skiensfjord, Frederickstad, 760 bls.
Int'l Acceptance Bank, by same, 205 rolls.
M. O'Meara Co., Mongolia, Gothenburg, 12 rolls.
C. G. Winans Co., by same, 876 rolls.
C. G. Winans Co., by same, 51 bls.
M. M. Cohen, by same, 67 rolls.
Parsons & Whittemore, Pr. Fillmore, Bremen, 1,735 rolls.
H. Reeve Angel & Co., by same, 641 rolls.
L. Schulman & Co., by same, 25 bls.
P. H. Petry & Co., Roussillon, Havre, 12 cs.
Whiting & Patterson, by same, 1 cs.
H. Riglander, by same, 2 cs.
Erstein & Co., by same, 5 cs.
F. W. Devoe & Co., by same, 5 cs.
Japan Paper Co., by same, 2 cs.
W. F. Cellins & Co., by same, 11 cs.
C. H. Boulin, by same, 17 cs.
Independent Forwarding Co., Paris, Havre, 6 cs.
J. Manheimer, by same, 23 bls.
R. F. Downing & Co., by same, 4 cs.
Judson Freight Forwarding Co., by same, 9 cs.
Rose & Frank, by same, 8 cs.
Whiting & Patterson, by same, 2 cs.
Japan Paper Co., Laormina, Genoa, 42 cs.
Globe Shipping Co., America, Bremen, 4 cs.
New York Tribune, by same, 340 rolls.
H. Reeve Angel & Co., by same, 43 rolls.
H. Reeve Angel & Co., by same, 289 bls.
L. Schulman Co., by same, 68 bls.
B. Harris & Co., by same, 177 bls.
Parsons & Whittemore, by same, 472 bls.
Parsons & Whittemore, by same, 736 rolls.
Overton & Co., by same, 2 cs.

RAGS, BAGGINGS, ETC.

Salomon Bros. & Co., Crissfield, Antwerp, 47 bls. rags.
Salomon Bros. & Co., Michigan, Antwerp, 165 bls. flax waste.
Salomon Bros. & Co., Missouri, Antwerp, 155 bls. flax waste.
Salomon Bros. & Co., Mercier, Antwerp, 187 bls. flax waste.
Salomon Bros. & Co., by same, 25 bls. rags.
Irving Nat'l Bank, by same, 125 bls. flax waste.
Irving Nat'l Bank, by same, 216 bls. bagging.
Castle & Overton, Rexmore, Dundee, 90 bls. jute waste.
Castle & Overton, Valacia, London, 49 bls. rags.
Cambridge Magazine, Alaskan, London, 36 bls. waste paper.
Albion Trading Co., Megantic, Liverpool, 6 bls. rags.
Irving Nat'l Bank, by same, 59 bls. rags.
Irving Nat'l Bank, Lapland, Antwerp, 369 bls. flax waste.
E. J. Keller Co., Inc., by same, 54 bls. thread waste.
Castle & Overton, Luxpalile, Barcelona, 100 bls. rags.
Ayres & Oddy Co., Inc., Arcturus, Bombay, 250 bls. cotton waste.
Equitable Trust Co., by same, 400 bls. cotton waste.
E. J. Keller Co., Inc., Phoebus, Genoa, 159 bls. cotton waste.
Brown Bros. & Co., Vitellia, Glasgow, 55 bls. paper stock.
Dallas Waste Mills, W. Plains, Hamburg, 578 bls. cotton waste.
Katzenstein & Keene, Inc., Zarembo, Havre, 311 bls. new cuttings.
Equitable Trust Co., London Corp., London, 281 bls. waste paper.
First Nat'l Bank of Boston, M. Maru, Kobe, 215 bls. cotton waste.
W. Hughes & Co., by same, 100 bls. cotton waste.
W. Hughes & Co., Volendam, Rotterdam, 45 bls. cotton waste.

OLD ROPE

Int'l Purchasing Co., Lapland, Antwerp, 78 bls. and 90 coils.
Equitable Trust Co., Columbia, Glasgow, 121 coils.
New York Trust Co., Mongolia, Hamburg, 49 coils.
Irving Nat'l Bank., W. Plains, Hamburg, 12 coils.
Katzenstein & Keene, Inc., C. of St. Joseph, Genoa, 125 coils.
W. Schall & Co., America, Bremen, 114 coils.
Brown Bros. & Co., Volendam, Rotterdam, 86 coils.
Salomon Bros. & Co., Lonora, Bordeaux, 86 coils.
Brown Bros. & Co., Francisco, Hull, 230 coils.

WOOD PULP

Johansson, Wales & Spaire, Inc., Drottningholm, Gothenburg, 504 bls.
E. M. Sergeant & Co., by same, 1,131 bls.
E. M. Sergeant & Co., Skiensfjord, Christiania, 650 bls.
M. Gottesman & Co., Inc., by same, 500 bls.
R. F. Hammond, by same, 1,600 bls, 200 tons.
J. Anderson & Co., Skiensfjord, Sarpsborg, 3,330 bls.
Kidder, Peabody Acceptance Corp., Skiensfjord, Drammen, 400 bls.
Scandinavian-Amer. Trading Co., Stal, Hernosand, 5,009 bls., 830 tons.
E. J. Keller Co., Inc., Stal, Kopman, 4,267 bls., 700 tons.
Scandinavian-Amer. Trading Co., W. Plains, Hamburg, 1,875 bls., 380 tons.
Johansson, Wales & Spaire, Inc., by same, 1,000 bls., 203 tons.
Castle & Overton, Mt. Clinton, Hamburg, 550 bls., 110 tons.
Pagel, Horten & Co., Inc., Albatros, Domsjo, 9,870 bls., 1,645 tons.
Bulkley, Dunton & Co., Toujer, Stugsund, 4,000 bls., 800 tons.
M. Gottesman & Co., Inc., Volendam, Rotterdam, 510 bls.

WOOD FLOUR

The Hansa Co., W. Plains, Hamburg, 650 bags, 30,100 ks.
B. L. Soherski, Skiensfjord, Frederickstad, 2,250 bags.

CASEIN

Atterbury Bros., Vestris, Buenos Aires, 1,000 bags.
J. A. & W. Bird & Co., by same, 145 bags.
A. Klipstein & Co., by same, 250 bags.
A. Klipstein & Co, Mesaba, London, 300 bags.
J. A. & W. Bird & Co., Can. Explorer, Wellington, 967 bags.
T. M. Duche & Sons, Cubano, Buenos Aires, 284 bags, 17,040 kilos.
Atterbury Bros., A. Legion, Buenos Aires, 500 bags, 30,000 kilos.
Kalbfleisch Corp., by same, 2,917 bags.
Kalbfleisch Corp., Mongolia, Hamburg, 167 bags.

BOSTON IMPORTS

WEEK ENDING JANUARY 13, 1923

C. K. MacAlpine & Co., Gustavsholm, Gothenburg, 82 bls. paper.
C. K. MacAlpine & Co., by same, 615 rolls paper.
Crocker, Burbank & Co., Menominee, London, 149 bls. waste paper.
G. M. Graves & Co., by same, 172 bls. waste paper.
American Express Co., by same, 120 bls. waste paper.
Brown Bros. & Co., by same, 192 bls. waste paper.
Crocker, Burbank & Co., Mesaba, London, 116 bls. waste paper.
Cambridge Magazine, Alaskan, London, 111 bls. waste paper.
Salomon Bros. & Co., Graciana, Glasgow, 178 bls. flax waste.
E. J. Keller Co., Inc., Blydendyk, Rotterdam, 58 bls. rags.
E. J. Keller Co., Inc., New Britain, Hamburg, 250 bls. rags.
E. J. Keller Co., Inc., West Campgard, Hamburg, 98 bls. rags.
Int'l Purchasing Co., Oxonian, Liverpool, 61 coils old rope.
Int'l Purchasing Co., Menominee, London, 271 coils old rope.
Int'l Purchasing Co., Mesaba, London, 284 coils old rope.
Int'l Purchasing Co., Darien, Liverpool, 203 coils old rope.

(Continued on page 64)

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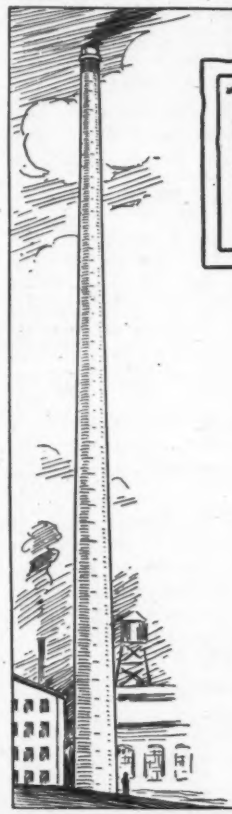

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(Write for Samples and Quotations)

SALES OFFICE
110 E. 42nd Street
NEW YORK

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
WEDNESDAY, JANUARY 17, 1923.

Mid-January buying enlivened the various paper and raw material markets of the past week to a perceptible degree, enhancing considerably quoted prices on waste papers, board and chemical pulp. The outstanding feature of the week was the bullish effect of the announcement of the Swedish pulp strike upon the various markets.

News print showed more activity both for contract and spot business than it has since before the holidays; the spot market for board of all descriptions snapped out of the lethargy which has characterized it since foreign pulps first weakened in tone in early December; fine and book papers held their own, no quotational alterations taking effect; lower grades of waste paper advanced in price while higher grades held firm; kraft moved in regular volume, still lacking stimulus of buying; rags and bagging picked up to an extent, and conditions at groundwood mills were greatly alleviated by the abundant rainfall and melting snow.

In a word, business in and around New York was brisk. The majority of grades of paper, pulp and paper stock exhibited tangible evidences of beginning last week where they left off in 1922 before the holiday depression set in.

Although the number and size of spot orders which accrued to news print dealers and manufacturers in the past week was but slightly better than usual, the undertone of the market was given considerable additional strength through the fact that grinding conditions have ameliorated so greatly. The mills have been filled up with contract orders for the first half of the current year, but have been forced to work at less than capacity by reason of the mechanical pulp shortage. Premiums have been placed on available supplies of freshly ground spruce, and the price of this commodity has, in many cases, been governed by the urgency of the consumer's demand. The news print industry now appears to be off on its first lap toward a new 1923 production-consumption record.

In the book paper field nothing of a revolutionary nature in point of price changes or demand has occurred in the week just past. Dealers state that business is of a humdrum character, and that buyers have not, up to this time in 1923, extended themselves. Mills are not over-busy and are availing themselves of the present opportunity to make repairs and get in readiness for the heavy demand expected in early February.

Fine papers have been keeping pace with book papers in that they have been, for the most part, inactive. Salesmen are finding business comparatively slack and report that buying is of a hand-to-mouth type. Export of fine papers in recent weeks has been dull.

Tissues have been gaining strength steadily since the first of the year although the increase in the general tone of the market has not been mirrored in rising prices as yet. Dealers look for a higher level of tissue prices within the next two weeks, however, in view of the soaring prices of groundwood. Transportation difficulties are disappearing one by one in this field, and producers are getting caught up on back contract shipments.

Kraft paper exhibited a slight spurt in activity along towards the close of the week, but for the most part business has been dull. Several large domestic dealers have reported that considerable quantities of kraft of foreign extraction still appear to be "floating around on the market" offered at prices below production cost in the United States.

Simultaneously with the announcement of the Swedish pulp mill strike the board market has shown definite signs of renewed activity, prices on practically every grade advancing during the week.

Mechanical Pulp

From all indications the ground wood market is not supported in its high prices merely by soap-bubble conditions, which are apt to change at any moment, but rather by the combination of an excessive demand with a prolonged period of low water and restricted production. Both manufacturers and dealers anticipate a gradual easing off from the bullish tone the market has assumed as soon as water again becomes plentiful in grinding regions, but it is believed that withdrawals against long overdue contracts will sustain the present level of pulp prices for some time after relief is in sight. Ground wood of domestic origin is bought freely at prices ranging between $44 and $48 per ton, while imported qualities are quoted at $46 to $49.

Chemical Pulp

Importers of pulp as well as those in the domestic market agree that the strike tying up one-third of Sweden's pulp industry, if protracted for any length of time, will have a decidedly bullish effect on the market in the United States. The very news of the strike appears to have firmed prices in a few pulp grades, although this may have been due to the increased buying which took place in this market in the last week to ten days. Paper mills have, in the main, a goodly volume of orders on hand, and the recent arrivals of pulp will probably receive more attention from buyers than has been manifested in the past month. As a rule dealers are noncommittal as to the effect the present strike will have upon contracts for Spring delivery.

Old Rope and Bagging

Available stocks of old rope are comparatively low, and during the last ten days the market has, at times, exhibited signs of returning strength. The bulk of negotiations has entailed l. c. l. quantities, carload lots and up being infrequent. Imports were in fairly heavy volume during the past month.

Bagging has not yet regained its feet after the slack buying period introduced by the holidays. Tissue mills are, however, running low on their stocks of raw materials, and in view of the orders now in hand it is believed that scrap bagging will come in for its share of activity in the near future. Roofing bagging shows slight advances.

Waste Paper

Mixed paper and news have been the leading features of a widespread advance which came to the waste paper market in the past week. The board making grades of paper stock have been the Mecca of consuming demand, many mid-western consumers having entered the market at the very moment when the market was being resuscitated in able fashion by Eastern buyers alone. This sudden stimulus has had the effect of making dealers wary again, and selling is done cautiously while the market is pointing upward at such an acute angle.

Rags

As an evidence that prosperity is once more on the threshold of the rag market, the roofing grades made steady gains during the past week both in the volume of business transacted and in point of price. Dealers trace the hardening tendency to the scarcity of offering during the past ten days and the heavy snows, tying up traffic in this commodity. Whites and blues have remained practically motionless, but it is believed advances will follow sympathetically the lead taken by the roofing grades.

Twine

The movement of twines continued to increase in the past week, but there were no price advances reported. In the estimation of dealers these will come as a matter of course once the demand attains normal proportions again. Stocks are reported to be at a low ebb and brisk business is, in consequence, expected to come not later than February.

Market Quotations

Paper Company Securities

New York Stock Exchange closing quotations January 16, 1922.

	BID	ASKED
American Writing Paper Company, pref.	28	28½
Internation Paper Company, com.	52¾	53¼
International Paper Company, pref., stamped	71	72½
Union Bag & Paper Corporation	64¾	65

Paper

F. o. b. Mill.

Ledgers	11.00	@	38.00
Bonds	9.00	@	55.00
Writings—			
Extra Superfine	16.00	@	35.00
Superfine	14.00	@	30.00
Tub Sized	10.00	@	15.00
Engine Sized	8.50	@	11.00
News—f. o. b. Mill—			
Rolls, contract	3.85	@	4.00
Rolls, transit	4.00	@	—
Sheets	4.00	@	—
Side Runs	3.25	@	3.50
Book, Cased—f. o. b. Mill			
S. & S. C.	7.50	@	12.00
M. F.	7.00	@	10.00
Coated and Enamel	9.00	@	14.00
Lithograph	9.00	@	14.00
Tissues—f. o. b. Mill			
White, No. 1	.95	@	1.10
Colored	1.25	@	2.50
Anti-Tarnish	1.75	@	2.25
Silver Tissue	—	@	—
Manila	.90	@	1.00
Kraft—f. o. b. Mill—			
No. 1 Domestic	7.00	@	7.50
No. 2 Domestic	6.50	@	6.75
Imported	6.50	@	7.00
Screenings	3.15	@	3.40
Manila—			
No. 1 Jute	8.50	@	9.00
No. 2 Jute	7.75	@	8.50
No. 1 Wood	4.50	@	5.50
No. 2 Wood	4.00	@	4.50
Butchers	4.25	@	4.75
Fiber Papers—			
No. 1 Fiber	6.00	@	6.25
No. 2 Fiber	5.25	@	5.50
Common Bogus	3.50	@	—
Card Middles	4.00	@	5.00
Boards—per ton—			
News	65.00	@	—
Straw	75.00	@	—
Chip	60.00	@	—
Binders' Board	75.00	@	85.00
Sgl. Mla. Lt.Chip.	75.00	@	—
Wood Pulp	75.00	@	—
Container	80.00	@	—
Wax Paper—			
Self Sealing White 28 and 30 lb. basis	11.00	@	12.00
Waxed Tissue	1.60	@	1.80
Glassine—			
Bleached, basis 25 lbs.	15.00 nominal		
Bleached, basis 20 lbs.	13.00 nominal		
Papermakers' Felts, per ton—			
Dry	75.00	@	85.00
Saturated	65.00	@	75.00
Sheathing Paper, per ton—			
Rosin Sized (red and gray, 30 lbs. per 500 sq. ft.)	55.00	@	65.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	42.00	@	46.00
No. 1 Domestic	44.00	@	48.00
For immediate shipment	48.00	@	—

Chemical Pulp

(Ex-Dock, Atlantic Ports.)

Sulphite (Imported)—			
Bleached	4.50	@	5.00
Easy Bleaching	3.25	@	3.50
No. 1 strong unbleached	3.10	@	3.40
No. 2 Strong unbleached	2.90	@	3.20
No. 1 Kraft	2.85	@	3.00
Sulphate—			
Bleached	4.00	@	4.25
(F. o. b. Pulp Mill.)			
Sulphite (Domestic)—			
Bleached	4.50	@	5.00
Strong unbl'chd.	3.00	@	3.40
Easy Bleaching Sulphite	3.00	@	3.25
News Sulphite	2.75	@	3.00
Mitscherlich	3.10	@	3.50
Kratt (Domestic)	3.20	@	3.40
Soda Bleached	4.25	@	4.50

Domestic Rags

New Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—			
New White, No. 1.	11.50	@	12.00
New White, No. 2.	6.50	@	7.00
Silesias, No. 1	7.50	@	8.00
New Unbleached.	9.00	@	9.50
Washables	4.50	@	5.00
Fancy	6.25	@	6.75
Cotton—according to Grades—			
Blue Overall	5.50	@	6.00
New Blue	4.75	@	5.00
New Black Soft.	5.50	@	6.00
New Light Seconds	2.75	@	3.00
O. D. Khaki Cuttings	4.00	@	4.50
Men's Corduroy.	3.00	@	3.25
New Canvas	7.00	@	7.25
New Black Mixed	2.50	@	2.75
Old White, No. 1—			
Repacked	6.50	@	6.75
Miscellaneous	5.50	@	5.75
White, No. 2—			
Repacked	3.25	@	3.50
Miscellaneous	5.50	@	5.75
St. Soiled White	1.75	@	1.85
Thirds and Blues—			
Repacked	1.90	@	2.10
Miscellaneous	1.50	@	1.60
Black stockings	2.90	@	3.25
Roofing Rags—			
Cloth Strippings	1.10	@	1.20
No. 1	1.10	@	1.20
No. 2	1.00	@	1.10
No. 3	.80	@	.90
No. 4	.80	@	.90
No. 5A	1.00	@	1.10

Foreign Rags

New Light Silesias.	6.00 nominal		
Light Flannelettes	6.75 nominal		
Unbl'chd Cottons	7.50 nominal		
New White Cuttings	9.50 nominal		
New Light Oxfords	6.00 nominal		
New Light Prints	4.50 nominal		
New Mixed Cuttings	2.00	@	2.50
New Dark Cuttings.	1.90	@	2.10
No. 1 White Linens	9.00	@	11.00
No. 2 White Linens	6.50 nominal		
No. 3 White Linens	5.00 nominal		
No. 4 White Linens	3.50 nominal		
Old Extra Light Prints	2.00 nominal		
Ord. Light Prints	1.75 nominal		
Med. Light Prints.	1.50 nominal		
Dutch Blue Cottons	1.85 nominal		
German Blue Cottons	1.60	@	1.70
Ger. Blue Linens	3.50 nominal		
Checks and Blues	1.50 nominal		
Dark Cottons	1.30	@	1.35
Shoppery	1.00	@	1.05
French Blues	1.75	@	2.00

Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—			
Foreign	1.00	@	1.10
Domestic	1.00	@	1.10
Wool, Tares, light.	1.45	@	1.55
Wool, Tares, heavy	1.40	@	1.50
Bright Bagging	1.05	@	1.20
No. 1 Scrap	1.05	@	1.20
Sound Bagging	.85	@	.95
Manila Rope—			
Foreign	5.75	@	6.00
Domestic	6.00	@	6.25
New Bu. Cut	2.25	@	2.45
Hessian Jute Threads—			
Foreign	2.25	@	2.50
Domestic	2.20	@	2.40
Mixed Strings	.90	@	1.00

Twines

Cotton—(F. o. b. Mill)			
No. 1	.35	@	.37
No. 2	.31	@	.33
No. 3	.37	@	.39
India, No. 6 basis—			
Light	.20	@	.21
Dark	.19	@	.20
B. C., 18 Basis	.41	@	.42
A. B. Italian, 18 Basis	.51	@	.61
Finished Jute—			
Dark, 18 basis	.29	@	.30
Light, 18 basis	.26	@	.27
Jute Wrapping, 3-6 Ply—			
No. 1	.23	@	.24
No. 2	.21	@	.22
Tube Rope—			
4-ply and larger.	.15	@	.17
Fine Tube Yarn—			
5-ply and larger.	.19	@	.21
4-ply	.20	@	.22
3-ply	.20	@	.22
Unfinished India—			
Basis	.16	@	.17
Paper Makers Twine			
Balls	.13	@	.15
Box Twine, 2-3 ply	.18	@	.19
Jute Rope	.17	@	.20
Amer. Hemp, 6	.33	@	.35
Sisal Hay Rope—			
No. 1 Basis	.15	@	.17
No. 2 Basis	.13	@	.15
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.18	@	.19

Old Waste Papers

(F. o. b. New York)

Shavings—			
Hard, White, No. 1	4.20	@	4.40
Hard, White, No. 2	3.75	@	4.15
Soft, White, No. 1	3.60	@	3.80
Flat Stock—			
Stitchless	2.65	@	2.70
Over Issue Mag.	2.75	@	2.85
Solid Flat Book	2.45	@	2.50
Crumpled No. 1.	2.10	@	2.15
Solid Book Ledger.	3.00	@	3.25
Ledger Stock	2.70	@	2.80
New B. B. Chips.	1.00	@	1.10
Manilas—			
New Env. Cut	2.80	@	3.10
New Cut No. 1	2.00	@	2.25
Extra No. 1 Old.	1.80	@	1.90
Print	1.65	@	1.75
Container Board.	1.25	@	1.35
Bogus Wrapper	1.10	@	1.20
Old Kraffts, machine compressed Bales	2.15	@	2.25
News—			
No. 1 White News	2.10	@	2.25
Strictly Overissue	1.50	@	1.60
Strictly Folded	1.25	@	1.40
No. 1 Mixed Paper.	1.10	@	1.25
Common Paper	.80	@	.85

CHICAGO

[FROM OUR REGULAR CORRESPONDENT]

Paper

F. o. b. Mill

All Rag Bond	35	@	40
No. 1 Rag Bond	30	@	35
No. 2 Rag Bond	18	@	25
Water Marked Sulphite	10	@	14
Sulphite Bond	9½	@	12
Sulphite Ledger	12	@	14
Superfine Writing	18	@	24
No. 1 Fine Writing.	14	@	22
No. 2 Fine Writing.	12	@	20
No. 3 Fine Writing.	9	@	12
No. 1 M. F. Book.	6½	@	7
No. 1 S. & S. C. Book	7	@	7½
Coated Book	8¾	@	9
Coated Label	8½	@	8¾
News—Rolls mill	4	@	4½
News—Sheets, mill.	4½	@	4¾
No. 1 Manila	4½	@	6
No. 1 Fiber	5¾	@	5¾
No. 2 Manila	4½	@	5
Butchers' Manila	4	@	4½
No. 1 Kraft	7	@	7½
No. 2 Kraft	6½	@	7
Wood Tag Boards	4½	@	5
Screenings	3	@	4
Boards, per ton—Plain Chip, Solid News, Manila Lined Chip, Container Line—85 Test, 100 Test	All quotations withdrawn		

Old Papers

Shavings—			
No. 1 Hard White	4.15	@	4.35
No. 1 Soft Shav.	3.75	@	4.00
No. 1 Mixed	1.65	@	1.75
No. 2 Mixed	1.65	@	1.75
White Envel. Cuttings	4.15	@	4.35
Ledgers and Writings	3.00	@	3.15
Solid Books	2.75	@	3.00
No. 1 Books, Light.	2.55	@	2.70
Blanks	2.10	@	2.35
Ex. No. 1 Manila	2.35	@	2.50
Manila Envelope Cuttings	2.40	@	2.60
No. 1 Manilas	1.75	@	2.00
Folders News (over issue)	1.65	@	1.75
Old Newspaper	1.60	@	1.70
Mixed Papers	1.50	@	1.60
Straw Clippings	1.50	@	1.60
Binders Clippings	1.50	@	1.60
Kraft	2.50	@	2.60
New Kraft Cuts	2.60	@	2.75
Roofing Stock, f. o. b. Chicago, Net Cash—			
No. 1	26.00	@	—
No. 2	24.00	@	—
No. 3	22.00	@	—
No. 4	22.00	@	—

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT]

Paper

Bonds	.10	@	.60
Ledgers	.15	@	.40
Writings—			
Superfine	.15	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.30
Fine, No. 2	.20	@	.25
Fine, No. 3	.15	@	.20
Book, M. F.	.06	@	.11
Book, S. S. & C.	.08	@	.15
Book, Coated	.08	@	.15
Coated Lithograph	.10	@	.15
Label	.08	@	.15
News	.05	@	.07
No. 1 Jute Manila.	.12	@	.13
Manila Sul., No. 1.	.08	@	.10
Manila No. 2	.07½	@	.08
No. 2 Kraft	—	@	.10
No. 1 Kraft	—	@	.11
Common Bogus	.02½	@	.03
Straw Board	67.50	@	70.00
News Board	58.00	@	
Chip Board	58.00	@	
Wood Pulp Board. (Carload Lots)	1.20	@	1.25
Binder Boards—			
Per ton	80.00	@	
Carload lots	80.00	@	
Tarred Felts—			
Regular	48.00	@	50.00
Slaters	54.00	@	56.00
Best Tarred, 1-ply (per roll)	1.35	@	1.50
Best Tarred, 2-ply (per roll)	1.00	@	1.15
Best Tarred, 3-ply	1.50	@	1.65

Bagging

F. o. b. Phila.

Gunny No. 1—			
Foreign	1.10	@	
Domestic	1.10	@	
Manila Rope	5.25	@	5.75
Sisal Rope	.75	@	.80
Mixed Rope	.75	@	.80
Scrap Burlaps	1.00	@	1.25
Wool Tares, heavy.	2.50	@	2.75
Mixed Strings	.75	@	.80
No. 1, New Lt. Burlap	1.75	@	2.00
New Burlap Cuttings	1.75	@	2.10

Old Papers

F. o. b. Phila.

Shavings—			
No. 1, Hard White	4.00	@	4.25
No. 2, Hard White	3.50	@	3.75
No. 1 Soft White	3.60	@	3.75
No. 2 Soft White	2.00	@	2.25
No. 1 Mixed	1.50	@	1.75
No. 2 Mixed	1.00	@	1.25

(Continued on page 66)

Imports and Exports of Paper and Paper Stock

(*Continued from page 60*)

J. A. & W. Bird & Co., Cubano, Buenos Aires, 668 bgs. casein, 40,080 ks.
Atterbury Bros., by same, 500 bgs. casein, 30,000 ks.
T. M. Duche & Sons, by same, 834 bgs. casein, 50,040 ks.
J. A. & W. Bird & Co., Bonheur, Buenos Aires, 834 bgs. casein, 50,040 ks.
F. Rohner, Alaskan, London, 100 bgs. casein.

LOS ANGELES IMPORTS

WEEK ENDING JANUARY 13, 1923

Los Angeles Paper Mfg. Co., Alaskan, London, 324 bls. rags.

TORONTO IMPORTS

WEEK ENDING JANUARY 13, 1923

Kalbfleisch Corp., A. Legion, Buenos Aires, 417 bags casein.

PHILADELPHIA IMPORTS

WEEK ENDING JANUARY 13, 1923

Scandinavian-Amer. Trading Co., Stal, Hernosand, 2,820 bls., 470 tons wood pulp.
J. Anderson & Co., by same, 4,500 bls, 750 tons wood pulp.
Price & Pierce, Ltd., by same, 2,473 bls., 450 tons wood pulp.
Dill & Collins, London Corp., London, 437 bls. waste paper.
Equitable Trust Co., by same, 41 bls. waste paper.
S. Birkenstein & Sons, by same, 43 bls. bagging.
Castle & Overton, Manch. Merchant, Manchester, 128 bls. waste paper.
Castle & Overton, by same, 58 bls. rags.
Salomon Bros. & Co., Sonora, Havre, 127 bls. rags.
Salomon Bros. & Co., by same, 161 bls. rags.
Salomon Bros. & Co., Bradclyde, Hamburg, 133 bls. rags.
Salomon Bros. & Co., by same, 196 bls. rags.
Katzenstein & Keene, Inc., Marigot, Dunkirk, 80 bls. rags.
Katzenstein & Keene, Inc., E. Dawn, Antwerp, 62 bls. rags.
Katzenstein & Keene, Inc., Malgache, Palermo, 100 bls. rags.
Katzenstein & Keene, Inc., Binnendyk, Rotterdam, 172 bls. rags.
E. J. Keller Co., Inc., Bourbonnais, Marseilles, 982 bls. rags.
E. J. Keller Co., Inc., Shanghai, 50 bls. cotton waste.
E. J. Keller Co., Inc., Blydendyk, Rotterdam, 213 bls. rags.
E. J. Keller Co., Inc., by same, 57 bls. old rope.
S. Birkenstein & Sons, London Corp., London, 97 coils old rope.

GALVESTON IMPORTS

WEEK ENDING JANUARY 13, 1923

E. J. Keller Co., Inc., Cranford, Rotterdam, 40 bls. rags.

BALTIMORE IMPORTS

WEEK ENDING JANUARY 13, 1923

D. F. Hammond, Ferm, Gothenburg, 500 bls., 100 tons wood pulp.
Bulkley, Dunton & Co., Toujer, Stugsund, 13,750 bls., 2,750 tons wood pulp.
Scandinavian-Amer. Trading Co., Toujer, Narrkoping, 2,250 bls., 456 tons wood pulp.
Textile Trading Co., Luxpalile, Genoa, 151 bls. cotton waste.
E. J. Keller Co., Inc., West Haven, Rotterdam, 46 bls. rags.
Salomon Bros. & Co., Michigan, Antwerp, 233 bls. rags.
Castle & Overton, Glen Ridge, Rotterdam, 475 bls. rags.

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 17, 1923.—The purchasing officer of the Government Printing Office has received the following paper bids:

19,200 lbs. 20 x 25—48 various colors cover paper: R. P. Andrews Paper Company, at $.0983 per lb.; Knowlton Brothers, at $.0931, $.1031 and $.0956; Mathers-Lamm Paper Company, $.1083; Dobler & Mudge, $.1085; The Whitaker Paper Company, $.1012; Thos. Barrett & Son, $.1118; Old Dominion Paper Company, $.1099; Graham Paper Company, $.1165.

20,000 lbs. 34 x 44—No. 10 trunk board: The C. L. La Boiteaux Company, at $.0375 per lb.; Dobler & Mudge, $.05; The Republic Bag and Paper Company, $.0426; R. P. Andrews Paper Company, $.037625; Mathers-Lamm Paper Company, $.0415; Ingalls & Co., $.036; C. B. Hewitt & Bros., Inc., $.0365; Kerr Paper Mill Company, $.04; The Whitaker Paper Company, $.036.

16,800 lbs. 25 x 38—56 Wood Manila Paper Company, The Whitaker Paper Company, $.0721; Dobler & Mudge, $.075; R. P. Andrews Paper Company, $.0597; Samuel S. Alcorn, $.0675; Old Dominion Paper Company, $.0694; Paper Manufactures Company, $.06; Maurice O'Meara Company, $.0567.

20,000 lbs. 25 x 30—No. 30 Binders' Board, No. 2 quality: Mathers-Lamm Paper Company, at $85.00 per ton; The Republic Bag and Paper Company, $85.20; Dobler & Mudge, $85.00; The American Paper and Woodenware Company, $60.50; Kerr Paper Mill Co., $78.00; C. B. Hewitt & Bros., Inc., $71.00; Ingalls & Co., $69.00; The Whitaker Paper Company, $70.00; The C. L. La Boiteaux Company, $77.00.

7,400 lbs. 24 x 38—74 Sulphite Manila Paper: Samuel S. Alcorn, $.07 per lb.; Maurice O'Meara Company, $.075; R. P. Andrews Paper Company, $.0774; Old Dominion Paper Company, $.0824.

39,800 lbs. No. 24 and No. 32 White Ledger Paper: Carew Manufacturing Company at $.284; R. P. Andrews Paper Company, $.30; The Whitaker Paper Company, $.2843; Dobler & Mudge, $.35; The Aetna Paper Company, $.22.

7,200 lbs. 21 x 32—36 No. 20 Pink Writing Paper: The Aetna Paper Company, $.1305; Maurice O'Meara Company, $.115; Old Dominion Paper Company, $.1089; R. P. Andrews Paper Company, $.1625.

Bids will be opened at the Government Printing Office on January 19 for the following:

10,000 lbs. (200 reams) 25 x 38—50 White Antique Printing Paper; 10 reams (600 sheets to ream) 36 x 48 Gray Pressboard.

The Carew Manufacturing Company has been awarded the contract for furnishing the Government Printing Office with 39,800 lbs. (800 reams) of various sizes white ledger paper at $.284, bids for which were opened on January 5.

The Maurice O'Meara Paper Company has been awarded the contract by the Government Printing Office for furnishing 21,700 lbs. (300 reams) various sizes Rope Manila Paper at $.123 per lb., bids for which were opened on January 3.

Fillmore & Slade have been awarded the contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing 35,000 rolls of toilet paper at $3,640.

The Bryant Paper Company will furnish the Government Printing Office with 345,000 pounds of white M. F. printing paper No. 1 in 18" and 19" rolls at $.06925 per pound, and the same firm will also furnish 100,000 pounds of white S. & S. C. printing paper in 38" rolls at $.07115. Bids for these items were opened on January 2.

The R. P. Andrews Paper Company will furnish 7,400 pounds (100 reams) of 24 x 38—74 light colored sulphite manila paper at $.0774 per pound, bids for which were opened on January 5.

Swedish Paper Exports in October

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., January 17, 1923.—The Department of Commerce is in receipt of the following report from the American Consul General regarding Swedish paper exports during October:

"Swedish paper mills ran at full time in October and were reported to have enough orders to keep the mills going to the end of the year. United States and Canada were the largest buyers during the month, and there was an active domestic demand. Official reports show the export of paper for the month to have been: News print, 15,133 tons in 1922 as compared with 11,441 tons in 1921; other kinds of paper, 13,777 tons in 1922 as compared with 8,137 tons in 1921, and pasteboard, 1,935 tons in 1922 as compared with 1,078 tons in 1921.

"Prices on news print in rolls at the end of October were quoted at $80.43 per metric ton, at the mill. Kraft was quoted at $112.60 to $120.64, at mill, the latter price being charged for small lots of less than one ton."

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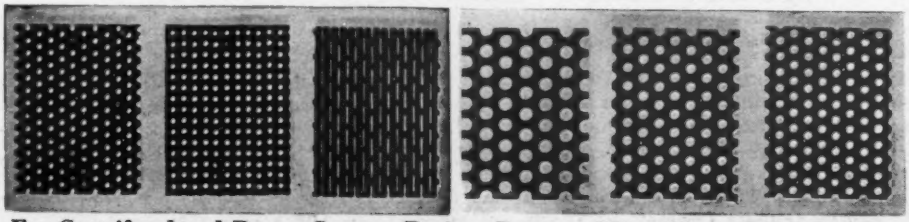

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Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
TUESDAY, JANUARY 16, 1923.

BLEACHING POWDER.—Bleach held its own during the past week, a noticeable enlivenment taking place as an aftermath of the dull holiday period. Prices held in the vicinity of 2.00 cents a pound, with large quantity orders being shaded a trifle.

BLANC FIXE.—From $85 to $90 a ton has been the average price for transactions in blanc fixe during the week past and the market appears to have a strong undertone. Buying has been fairly regular since the inception of the new year, the price of the pulp having held around $45 and $50 since the recent advance.

CAUSTIC SODA.—Dealers in this commodity state that prospects for good business in 1923 are excellent. The present market, they aver, is in a firm condition and the price of 2.50 cents a pound will enhance before it will go any lower. Production difficulties are gradually being surmounted.

CHINA CLAY.—Clay has not altered in price as a result of the picking up in business that has come since the holiday period, but the undertone of the market is strong and the quoted prices of $16 to $23 per ton for the foreign quality are firm ones. Domestic unwashed China clay is now listed at $9.50 to $12.50 per ton, while the washed grades range in value from $12.50 to $15.50.

CASEIN.—The tensity in the casein situation is, necessarily, alleviated with each incoming shipment of the Argentine product, but according to prominent dealers in lacterine, recent imports are but a "drop in the bucket" as compared with the ever-increasing demand. Casein is still quoted nominally at 21 and 22 cents a pound and spot supplies are almost impossible to obtain.

PAPERMAKERS' GLUE.—The grades of high glue most commonly used in tub sizing have been quoted during the past week at prices ranging from 13 to 20 cents a pound. Glue manufacturers report an enhancement in business from the paper trade in recent weeks and anticipate a healthy activity throughout 1923.

ROSIN.—Prices of the papermaking grades of rosin, E, F and G, have been fluctuating from day to day but holding, in the main, to the quoted price of 7.00 cents a pound, New York, for immediate shipment in barrels of 100 pounds.

SALTCAKE.—Demand is still consistently regular for both chrome and acid cake, the former now listing at $24 and $25 per ton and the latter at $27 and $28, producing mill. The market continues firm and prospects for an amelioration in the acid situation lead dealers to believe that saltcake production will soon be on the way to normal.

SODA ASH.—Mid-January business in soda ash, while not of a booming nature, is indicative of the general trend of good business which is affecting practically every chemical market. This alkali has held firm in price, the schedule quotation being 1.20 cents a pound.

STARCH.—Although corn sugar products have altered in price in the past week, price lists sent out by one of the leading starch producers show no changes in values of the latter commodity. The papermakers' grade of starch is still quoted at 2.82 cents a pound in bag lots and 3.10 cents in barrels, while powdered starch is correspondingly lower at 2.72 and 3.00 cents for these respective amounts.

SULPHATE OF ALUMINA.—A continued scarcity of bauxite and other raw materials entering into the production of sulphate of alumina is still proving a retarding factor in this market. Commercial sulphate has been moving in moderate-sized amounts, mostly on contract, at prices averaging 1.50 to 1.75 cents a pound. Iron free has been listed at 2.55 to 2.80 cents and the volume of business has increased since the first of the year.

SULPHUR.—Brimstone is holding as firm as the "rock of the ages," its quoted listing of $18 to $20 per ton ruling in last week's transactions. Contract buying for 1923 has been done freely and the market's position is decidedly firm.

Market Quotations

(*Continued from page 63*)

Solid Ledger Stock.	2.75	@	3.00
Writing Paper.....	2.50	@	2.75
No. 1 Books, heavy.	2.25	@	2.50
No. 2 Books, light.	1.40	@	1.50
No 1 New Manila.	2.75	@	3.00
No 1 Old Manila..	1.50	@	1.75
Container Manila...	1.35	@	1.40
Old Kraft.....	2.25	@	2.50
Overissue News....	150	@	1.60
Old Newspaper.....	1.20	@	1.25
No. 1 Mixed Paper.	1.10	@	1.15
Common Paper.....	1.00	@	1.10
Straw Board, Chip.	1.00	@	1.10
Binders Bd., Chip..	1.00	@	1.10

Domestic Rags—New.
Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1.	11¼	@	.11¾
New White, No. 2	.06	@	
Silicias, No 1....	.06½	@	.07
New unbleached..	.10¼	@	
Washables	.03¾	@	
Fancy	04¾	@	.05¾
Cottons—according to grades—			
Blue Overall....	.05½	@	.05¾
New Blue.....	.02¾	@	.02¾
New Black Soft.	.06¼	@	.06½
New Light Seconds	.02¾	@	.02¾
Khaki Cuttings..	.03½	@	.04¼
Corduroy	.03½	@	.03¾
New Canvass....	.07½	@	.08
New Black Mixed	.04	@	
Old White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous ...	.04½	@	.04¾
White, No. 2—			
Repacked	.03	@	.03½
Miscellaneous ...	.03	@	.03¼
Thirds and Blues—			
Repacked	200	@	2.25
Miscellaneous ...	1.85	@	1.90
Black Stockings....	2.75	@	3.00
Roofing Stock—			
No. 1.....	1.30	@	1.35
No 2.....	1.20	@	1.25
No 3.....	1.10	@	1.15
No. 4.....	110	@	1.15
No. 5A.....	1.05	@	110
B.....			nominal
C.....			nominal

BOSTON

[FROM OUR REGULAR CORRESPONDENT]

Paper

Bonds	.08	@	.50
Ledgers	.08½	@	.55
Writings	.08	@	.42
Superfine	.16	@	.26
Fine	.15	@	.18
Books, S. & S. C..	.07¼	@	.12
Books, M. F.....	.06¾	@	.09½
Books, coated	.09	@	.15
Label	.08½	@	.13
News, sheets	4.75	@	6.00
News, rolls	4.50	@	5.75
Manilas—			
No. 1 Manila...	$6.00	@	7.00
No. 1 Fiber ...	.06½	@	.07
No. 1 Jute	9.00	@	10.50
Kraft Wrapping ..	.07	@	
Common Bogus ...	3.50	@	3.85

Boards

(Per Ton Destination)

Chip	$60.00	@	65.00
News, Vat Lined..	63.50	@	67.50
Wood, Vat Lined.	$70.00	@	75.00
Filled News Board	65.00	@	70.00
Solid News Board.	75.00	@	
S. Manila Chip...	72.50	@	75.00
Pat. Coated.....	87.50	@	95.00

Old Papers

Shavings—			
No. 1 Hard White	4.25	@	4.50
No. 1 Soft White	3.00	@	3.50
No. 1 Mixed....	$1.50	@	1.75
Ledgers & Writings	2.25	@	2.50
Solid Books.....	2.25	@	2.50
Blanks	1.70	@	1.80
No. 2 Light Books.	1.75	@	1.90
Folded News, overissues	26.00	@	28.00
Gunny Bagging ...	.85	@	.90
Manila Rope.....	5.75	@	6.00
Common Paper....	1.20	@	1.25
Old News.....	1.30	@	1.40
Old Kraft	2.00	@	2.10

TORONTO

[FROM OUR REGULAR CORRESPONDENT]

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted.....	.12	@	.13½
Dark tinted.....	.13½	@	.15
Ledgers (sulphite).	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads).	3.75	@	—
Sheets (carloads)..	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho.	14.00	@	—
No. 2 Coated and litho.	13.00	@	—
No. 3 Coated and litho.	12.25	@	—
Coated and litho., colored	14.25	@	—
Wrapping—			
Grey	5.00	@	—
White Wrap....	5.75	@	—
"B" Manila.....	6.00	@	—
No. 1 Manila....	7.25	@	—
Fiber	7.25	@	—
Kraft, M. F.	8.00	@	—
M. G.	8.15	@	—

Pulp

(F. o. b. Mill)

Ground wood.....$40.00		@	50.00
Sulphite easy bleaching	60.00	@	70.00
Sulphite news grade.	55.00	@	60.00
Sulphite, bleached.	100.00	@	105.00
Sulphate	70.00	@	—

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut..	3.85	@	—
Soft White Book Shavings	3.50	@	
White Bl'k News.	2.00	@	—
Book and Ledger—			
Flat Magazine and Book Stock(old)	2.30	@	—
Light and Crumpled Book Stock	2.15	@	—
Ledgers and Writings	2.30	@	—
Solid Ledgers....	2.50	@	
Manilas—			
New Manila Cut.	2.10	@	
Printed Manilas..	1.75	@	—
Kraft	2.50	@	—
News and Scrap—			
Strictly Overissue	1.40	@	
Folded News....	1.40	@	
No. 1 Mixed Papers	.90	@	

Domestic Rags—
Price to mills, f. o. b. Toronto.

	Per lb.		
No. 1 White shirt cuttings	.11	@	.11¼
No. 2 White shirt cuttings	.06	@	—
Fancy shirt cuttings	.06	@	—
No. 1 Old whites	.04	@	—
Thirds and blues	2.15	@	2.35
	Per cwt.		
Black stockings...	2.50	@	—
Roofing stock:			
No. 1	1.25	@	—
No. 2	1.00	@	—
Roofing stock:			
Manila rope.....	6.10	@	
No. 2.....	1.50	@	
Gunny bagging....	1.00	@	